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ABSTRACT

This document contains vocational education program course standards for health occupations programs in Florida. Standards are provided for a total of 71 exploratory courses, practical arts courses, and job preparatory programs offered at the secondary or postsecondary level. Each program courses standard consists of a curriculum framework and student performance standards. Each curriculum framework includes four components: major concepts/content, laboratory activities, special notes, and intended outcomes. The student performance standards listed in each individual section are cross-referenced to the intended outcomes in that same section. Included are the following allied health occupations/fields: basic x-ray machine operator, cardiovascular technology, central service technology, coder specialist, dental aide, dental laboratory technology and management, diagnostic medical sonography technology, electrocardiograph technology, emergency medical services, funeral services, health information management, health occupations cooperative education, health unit coordinator, hearing aid dispensing, home health aide, hospital admitting officer, human services, massage, medical clinical dosimetry, medical laboratory technology, medical record transcribing, midwifery, nuclear medicine technology, nursing, occupational therapy, ophthalmic technician, paramedic, patient care assistant, physical therapist assistant, practical nursing, radiation protection technology, radiation therapy, radiography, respiratory care, surgical technology, veterinary technology, and vision care technology. (MN)

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VOCATIONAL EDUCATION PROGRAM COURSES STANDARDS

July, 1993

Health Occupations Education

ED 361 578

CE 064 584

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VOCATIONAL EDUCATION

PROGRAM COURSES STANDARDS

HEALTH OCCUPATIONS EDUCATION

JULY, 1993

FLORIDA DEPARTMENT OF EDUCATION
Division of Vocational, Adult, and Community Education
Bureau of Vocational Programs and Services,
Vocational Programs Section

904/ 487-4439

FOREWORD

NOTE: In all postsecondary adult vocational (PSAV) level programs, Section III, Curriculum Frameworks--regarding minimum basic skills grade level-- the correct statute reference should be 239.213 F.S. NOT 233.0695 F.S.

Section 228.041 Florida Statutes defines vocational education as meaning that instruction not necessarily leading to a baccalaureate degree, either graded or ungraded, listed below:

1. Job preparatory programs designed to provide students with the competencies necessary for effective entry into an occupation;

2. Exploratory courses designed to give students initial exposure to skills and attitudes associated with a broad range of occupations in order to assist them in making informed decisions regarding their future academic and occupational goals;

3. Supplemental programs (courses) designed to enable persons who are or have been employed in a specific occupation to upgrade their competencies in order to re-enter or maintain stability or advance within their occupation;

4. Practical arts courses designed to teach students practical generic skills which, though applicable to some occupations, are not designed to prepare students for entry into a specific occupation;

5. Instruction which integrates the basic academic skills and vocational skills.

This document contains vocational education program courses standards (curriculum frameworks and student performance standards) for exploratory courses, practical arts courses and job preparatory programs offered at the secondary or postsecondary level as a part of Florida's comprehensive vocational education program. Vocational education program courses standards are established pursuant to Section 239.205, Section 233.011, and Section 232.2454, Florida Statutes, for school districts and community colleges. State Board of Education Rule 6A-6.0571, Criteria for Qualification for Special Vocational-Technical Education Program Courses, provides the basis for the development and dissemination of this document.

Each program courses standard is composed of two parts: a curriculum framework and student performance standards. The curriculum framework includes four major sections: major concepts/content, laboratory activities, special notes, and intended outcomes. Student performance standards are listed for each intended outcome.

The standards do not prescribe how instruction should be delivered since decisions relative to the delivery of instruction must be made by school districts and community colleges within the context of local conditions. The Division of Vocational, Adult and Community Education, Florida Department of Education, supports the belief that competency-based vocational education is the most effective means of providing programs and courses that conform to these established standards.

Program and course standards are based upon competencies required for entry, advancement, and upgrading in occupations in the vocational program areas of Agriculture, Business, Diversified, Health Occupations, Home Economics, Technology, Industrial, Marketing, and Public Service Education. Standards for courses designed for handicapped, disadvantaged, and other special needs persons are also provided. The standards are reviewed annually and revised as needed based upon changes in occupations utilizing input from professional associations, state technical committees, and other representatives of the private sector.

TABLE OF CONTENTS

PAGE

FOREWORD i

INTRODUCTION v

Orientation to Health Occupations 1
Exploration of Health Occupations 7
Medical Skills and Services.......... 13
Practical Health Skills I 17
Practical Health Skills II 21
Applied Medical Science 25
Basic X-Ray Machine Operator 41
Cardiovascular Technology 47
Central Service Technology 55
Coder Specialist 61
Dental Aide 67
Dental Assisting 79
Dental Hygiene 85
Dental Laboratory Assisting 89
Dental Laboratory Technology 105
Dental Laboratory Technology and Management 109
Diagnostic Medical Sonography Specialist 113
Diagnostic Medical Sonography Technology 121
Electrocardiograph Aide 129
Electrocardiograph Technology 133
Electroencephalograph Technology 139
Emergency Medical Services (Associate Degree) 147
Emergency Medical Technician 165
First Responder 173
Funeral Services 181
Health Information Management 193
Health Occupations Cooperative Education - OJT 199
Health Occupations Education Directed Study 203
Health Service Occupations 207
Health Services Management.......... 221
Health Unit Coordinator 227
Hearing Aid Dispensing 239
Home Health Aide 243
Hospital Admitting Officer 249
Hospital Housekeeping Supervision 253
Human Services 259
Massage 269
Medical Assisting 275
Medical Clinical Dosimetry 281
Medical Clinical Dosimetry Management 287
Medical Laboratory Assisting 293
Medical Laboratory Technology (Associate Degree) 305
Medical Laboratory Technology (Certificate) 309
Medical Record Transcribing 315

Midwifery 319
Nuclear Medicine Technology 327
Nursing Assistant 331
Nursing (Associate Degree) R.N. 337
Occupational Therapy Assistant 345
Ophthalmic Assisting 351
Ophthalmic Dispensing 357
Ophthalmic Technician 363
Optometric Assisting 369
Paramedic 375
Patient Care Assistant 389
Pharmacy Technician 405
Phlebotomy Technician 411
Physical Therapist Aide 417
Physical Therapist Assistant 423
Practical Nursing 429
Psychiatric Technology 459
Radiation Protection Technology 465
Radiation Therapy Specialist 471
Radiation Therapy Technology 477
Radiography 483
Respiratory Care 489
Respiratory Care Technician 497
Surgical Technology 505
Veterinary Technology 509
Vision Care Assisting 519
Vision Care Technology/Opticianry 535

INTRODUCTION

HEALTH OCCUPATIONS EDUCATION

Health Occupations Education comprises the body of subject matter and planned learning experiences designed to prepare persons with competencies required to assist qualified health professionals in providing diagnostic, therapeutic, preventive, restorative, and rehabilitative services to patients in health care facilities, in the home, and in the community. The educational programs offered in Florida may be grouped into the following occupational cluster areas: Dental, Environmental Health, Medical Laboratory, Human Services/Mental Health, Nursing, Ophthalmic, Radiologic, Rehabilitation, and Miscellaneous Health Occupations.

Clinical affiliations or agreements between educational institutions and health care agencies are an integral and critical component of health occupations education programs. There is an effective integration of didactic experience and clinical experience formalized by written contracts of agreement between the two parties. The programs are designed not only to develop clinical or technical skills but also to teach roles, relationships, and responsibilities in the practice setting.

Techniques for the regulation of workers in the health occupations have been developed and administered as a means of safeguarding the public against unqualified workers. Therefore, regulatory procedures involving licensure, certification, or registration in certain of the health occupations have been established that affect program operation. In Florida, graduates from 16 of the programs must be licensed by the State as a requirement for employment. In addition, graduates from an additional 10 programs should be eligible for certification by various certifying agencies at the national level.

Health Occupations Education programs include instruction relating to the free enterprise system and to consumer education. This instruction is designed to make the students aware that the free enterprise or competitive economic system exists as the prevailing economic system in the United States. Also, in regard to consumer education, instruction is provided to help students become more knowledgeable in acquiring goods, services, and credit in the most economical and effective manner. Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice.

The cooperative education method of instruction is appropriate for many of the health occupations education programs. However, listed below are those programs for which the cooperative method may not be used:

Dental Assisting, (CDA)
Dental Hygiene
Emergency Medical Technology - EMT
Emergency Medical Technology - Paramedic
Practical Nursing
Nursing (Associate Degree) R. N.
Radiologic Technology
Radiation Therapy

The vocational student organization, Health Occupations Students of America, is an appropriate method for providing leadership training experiences and for reinforcing specific knowledge and skills in the Health Occupations Education programs. The activities of the organization, when provided, must be an integral part of the specific program and must complement the objectives of the program. Many professional associations have provided for student membership in their respective societies. Students should be encouraged to participate in these professional societies particularly if the society provides leadership experiences or reinforces role relationships.

Student performance standards are presented for each curriculum framework outcome. These are the minimum standards on which program completers will be evaluated. School districts may add to these minimum standards as the particular area needs or employer requirements are considered.

In order for revisions to be incorporated in these program standards, comments must have been received by the Occupational Program Director prior to November 1 of each year. It must be realized that not all changes suggested may be realistic within the confines of the regulatory agency concerned.

8

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

COURSE TITLE: Orientation to Health Occupations

CODE NUMBER: Secondary 8400110 Postsecondary ______

Florida CIP 0317.9999OR

SECONDARY SCHOOL CREDITS 0.5 COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): x 6-9 ______ 9-12 ______ Postsecondary Adult Vocational

______ Postsecondary Vocational x Other 30, 31

CERTIFICATION COVERAGE: HEALTH ED @4 HEALTH @2 6
ANY HEALTH OCCUP ED G ANY PUBLIC SERVICE OCC G

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to acquaint students with career opportunities and job requirements in health occupations which will enable students to consider career objectives and interests.

The students will be provided with basic information about the kinds of jobs and workers involved, the various career paths, financial rewards, occupational hazards, and educational requirements. Information concerning the practices for promoting good health is included.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Special projects that are related to occupational clusters are provided, including making dental molds, designing eye glasses, fingerprinting, role playing activities of daily living as a handicapped individual, developing an emergency evacuation plan for their own home, menu planning, and visualizing X-rays.

III. SPECIAL NOTE: Guest speakers from industry make an important contribution to the effectiveness of this program/course.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Demonstrate knowledge of progress in health and public service.
02. Demonstrate knowledge of health and public service careers.
03. Identify life stages and the health care needs of each.
04. Demonstrate knowledge of legal and ethical behavior related to health care and public service occupations.
05. Demonstrate basic communication skills.
06. Demonstrate knowledge of basic math skills and their application to health and public service careers.
07. Demonstrate principles of wellness.
08. Demonstrate knowledge of the sciences in the health care field.
09. Perform basic health care skills.
10. Demonstrate knowledge of occupational safety.
11. Demonstrate knowledge of terms relating to public service and health occupations.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations
SECONDARY NUMBER: 8400110
COURSE TITLE: Orientation to Health Occupations
POSTSECONDARY NUMBER: ______

01.0 DEMONSTRATE KNOWLEDGE OF PROGRESS IN HEALTH CARE AND PUBLIC SERVICE -- The student will be able to:

01.0 Describe medical progress from early times to the present, including advances in surgical techniques, anesthesia, treatment and equipment.
01.02 Describe progress in public service occupations from early times to the present.
01.03 Describe how the scientific method and advances in science have impacted beliefs and practices from ancient times to the present.
01.04 List types of health care and public service delivery systems in institutions, homes and the community.

01.05 Identify contributions made in the field of medical science.
01.06 Describe how to make more informed decisions regarding choice of health care providers and products.

02.0 DEMONSTRATE KNOWLEDGE OF HEALTH AND PUBLIC SERVICE CAREERS -- The student will be able to:

02.01 Describe the relationship between self-awareness and satisfying career choices.
02.02 List and describe tasks related to the health field.
02.03 List and describe tasks related to public service careers.
02.04 Identify the personal traits required for employment in health care and public service.
02.05 List factors related to job satisfaction.
02.06 Complete a project, solve a problem, or complete an activity related to a career through team or group work.
02.07 List at least three occupations out of each of the career clusters: nursing services, dental auxiliary, medical office, health care information technology, emergency medical services, diagnostic services, therapeutic services, supportive services, vision care services, and other health care services.
02.08 List at least three occupations out of each of the career clusters: criminal justice, fire fighting, parks and recreation, and environmental occupations.
02.09 List the advantages and disadvantages of one occupation in each cluster.
02.10 Define governmental and non-governmental (volunteer) health and public service agencies and give examples of each.
02.11 Describe functions/services of various health and public service agencies.
02.12 Give examples of the following: on-the-job training, unskilled, skilled and semi-skilled labor, vocational education, technical education, professional education and apprenticeship.

03.0 IDENTIFY LIFE STAGES AND THE HEALTH CARE NEEDS OF EACH -- The student will be able to:

03.01 Describe common normal characteristics of the various life stages from birth to death.
03.02 List common health care needs of these various life stages.
03.03 Develop a health plan for an identified life stage that should result in optimum health.

04.0 DEMONSTRATE KNOWLEDGE OF LEGAL AND ETHICAL BEHAVIOR RELATED TO HEALTH CARE AND PUBLIC SERVICE OCCUPATIONS
-- The student will be able to:

04.01 Describe responsibilities in maintaining ethical and legal standards, including confidentiality, and patient's rights.
04.02 Define terms related to the legal and ethical aspects of the health care industry and public service occupations, such as malpractice, negligence, assault, invasion of privacy, quackery, ethics and law, and Patients Bill of Rights.

05.0 DEMONSTRATE BASIC COMMUNICATION SKILLS
-- The student will be able to:

05.01 Demonstrate ability to follow written and oral directions.
05.02 Demonstrate examples of verbal and non-verbal communication.
05.03 List barriers to communication.
05.04 Explain how computers are used in the medical and public service occupations.
05.05 Demonstrate a knowledge of basic terminology and common abbreviations used in various health and public service occupations.

06.0 DEMONSTRATE KNOWLEDGE OF BASIC MATH SKILLS AND THEIR APPLICATION TO HEALTH AND PUBLIC SERVICE CAREERS
-- The student will be able to:

06.01 Describe why accurate calculations and effective problem solving skills are required in health and public service careers.
06.02 Calculate simple mathematical problems and measurements related to health care and public service.
06.03 Record occupationally related information such as fingerprinting and TPR's on graphs.
06.04 Describe how the scientific method of problem solving relates to the health and public service industry.

07.0 DEMONSTRATE PRINCIPLES OF WELLNESS -- The student will be able to:

07.01 List signs of good health.
07.02 Describe how cultural and individual differences affect wellness.
07.03 Describe various lifestyle practices that affect wellness positively or negatively.
07.04 Describe how the cause and effect of common diseases and disorders relates to prevention and treatment.
07.05 Identify consequences of substance abuse and high risk behaviors.
07.06 Identify ecological issues that affect wellness and environmental careers related to health and public service.

08.0 DEMONSTRATE KNOWLEDGE OF THE SCIENCES IN THE HEALTH CARE FIELD
-- The student will be able to:

08.01 Describe the general plan of the human body and how it functions.
08.02 Describe how basic principles of physical science, biology, and microbiology, such as principles of gravity, vacuum, and retardation of growth of microorganisms are applied within the health care industry.

09.0 PERFORM BASIC HEALTH CARE SKILLS -- The student will be able to:

09.01 Measure and record (graph) height, weight, temperature, pulse, and respiration (TPR).
09.02 Demonstrate medical aseptic technique, including but not limited to handwashing.
09.03 Demonstrate proper body mechanics to prevent self or patient

from injuries when moving or positioning patients/victims.

09.04 Describe the difference between major and minor emergencies.

09.05 Demonstrate basic first aid skills.

10.0 DEMONSTRATE KNOWLEDGE OF OCCUPATIONAL SAFETY -- The student will be able to:

10.01 Describe occupational safety issues as they relate to the employer, employee, and the patient or incarcerated person.

10.02 List health safety habits that will prevent injury to health care workers, co-workers, and patients.

10.03 Describe why following safety instructions is important.

10.04 Describe how poisons and hazardous materials commonly found in the occupational area are handled and controlled safely.

10.05 Describe the importance of fire safety including prevention and evacuation.

11.0 DEMONSTRATE A KNOWLEDGE OF TERMS RELATING TO PUBLIC SERVICE AND HEALTH OCCUPATIONS -- The student will be able to:

11.01 Name and define a list of common public service and health terms and abbreviations.

11.02 Use appropriate public service and health terms and abbreviations in selected activities.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

COURSE TITLE: Exploration of Health Occupations

CODE NUMBER: Secondary 8400210 Postsecondary _______

Florida CIP 0317.9999EX

SECONDARY SCHOOL CREDITS 0.5 COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): x 6-9 _____ 9-12 _____ Postsecondary Adult Vocational

______ Postsecondary Vocational x Other 30, 31

CERTIFICATION COVERAGE:
LAB TECH @7 G
RESP TEC @7 G
DENTAL HYG @5
RESP THER @7 G
PARAMEDIC @7 G
NURSING ED @5
MED RECTEC @7 G
MED ASST @7 G
TEC X RAY @7 G
PH THERTEC @7 G
¶HOME EC 1 @2
DENTL ASST @7 G
LAB ASST @7 G
¶VOC HM EC @4
PRAC NURSE @7 G
MENT HEAL @7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to give students initial exposure to the skills and attitudes associated with a broad range of occupations relating to careers in health, including job requirements and tasks performed, to assist students in making informed decisions regarding their future academic and occupational goals.

The content includes, exploratory activities relating to all health occupational clusters. The program also includes an introduction to medical ethics, consumerism, characteristics of health care workers, community health agencies and basic computer literacy.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Special projects that are related to each occupational cluster are provided, including role playing activities related to specific careers, visualizing x-rays and crutch-walking, operating the microscope, making orthopedic casts, and specific lab procedures.

III. SPECIAL NOTE: Guest speakers from industry and related field trips make important contributions to the effectiveness of this course.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Demonstrate knowledge of progress in health care.
02. Demonstrate knowledge of health careers.
03. Identify life stages and the health care needs of each.
04. Demonstrate knowledge of the importance of legal and ethical behavior related to health care.
05. Perform basic communication skills.
06. Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker.
07. Demonstrate a knowledge of wellness and its effect on the quality of life.
08. Demonstrate a knowledge of basic science principles in the health care field.
09. Perform basic health care skills.
10. Demonstrate occupational safety.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8400210

COURSE TITLE: Exploration of Health Occupations POSTSECONDARY NUMBER: _______

01.0 DEMONSTRATE KNOWLEDGE OF PROGRESS IN HEALTH CARE -- The student will be able to:

01.01 Describe how the scientific method and advances in science have impacted beliefs and practices from ancient times to the present.
01.02 Compare the broad scope of health care delivery systems in homes, institutions, and the community.
01.03 Demonstrate ability to make informed decisions regarding choice of health care providers and products.
01.04 Describe contributions made in the field of medical science and their impact on the health care field.

2.0 DEMONSTRATE KNOWLEDGE OF HEALTH CAREERS -- The student will be able to:

02.01 Describe the relationship between self-awareness and satisfying career choices.
02.02 List tasks related to a health career.
02.03 Identify the personal traits required for employment in health care and discuss factors related to job satisfaction.
02.04 List at least three careers out of each of the career clusters: nursing services, dental auxiliary, medical office, mental health, health care information technology, emergency medical services, diagnostic services, therapeutic services, supportive services, vision care services, and other health care services.
02.05 Describe how to research a career and do a report on one career from the above clusters, using the skills described.
02.06 List the advantages and disadvantages of one occupation in each cluster.
02.07 List classifications of health agencies including governmental and volunteer agencies.
02.08 Define and give examples of the following: on-the-job training, unskilled labor, vocational education, technical education, professional education, apprenticeship.

3.0 IDENTIFY LIFE STAGES AND THE HEALTH CARE NEEDS OF EACH -- The student will be able to:

03.01 Describe optimum health throughout all stages of life, including physical, mental, and social aspects.
03.02 Develop a personal health plan.
03.03 List Maslow's hierarchy of needs.
03.04 List and describe Elizabeth Kubler Ross' stages of death and dying.

4.0 DEMONSTRATE KNOWLEDGE OF THE IMPORTANCE OF LEGAL AND ETHICAL BEHAVIOR RELATED TO HEALTH CARE -- The student will be able to:

04.01 Describe the health care workers responsibilities in maintaining ethical standards, confidentiality, and the patient's rights.
04.02 Define terms related to the legal and ethical aspects of the health care industry. For example: malpractice, negligence, invasion of privacy, quackery, ethics and law, Patients Bill of Rights.
04.03 Identify ethical and unethical conduct through simulated examples such as role playing, making posters, TV commercials, etc.

05.0 PERFORM BASIC COMMUNICATION SKILLS -- The student will be able to:

05.01 Follow written and oral directions.
05.02 Differentiate between verbal and non-verbal communication.
05.03 Identify employability skills necessary to obtain a job in health care.
05.04 Explain how computers are used in the medical/health care industry.
05.05 Use common medical terminology and abbreviations associated with health occupations.

06.0 PERFORM BASIC MATHEMATICAL CALCULATIONS AND DEMONSTRATE PROBLEM SOLVING SKILLS USED BY THE HEALTH CARE WORKER -- The student will be able to:

06.01 Explain the importance of accurate calculations and effective problem solving skills for health care workers.
06.02 Calculate mathematical problems and measurements related to health care.
06.03 Use problem solving techniques, including the scientific method.
06.04 Convert common weights, measure, and volumes to metric as applied in the health care setting.

07.0 DEMONSTRATE A KNOWLEDGE OF WELLNESS AND ITS EFFECT ON THE QUALITY OF LIFE -- The student will be able to:

07.01 Describe how cultural differences impact health problems of society.
07.02 Identify cause and effect of common diseases and disorders and list ways to prevent and treat them.
07.03 Identify consequences of substance abuse and high risk behaviors.
07.04 Recognize and describe special problems of substance abuse for health care workers.
07.05 Identify ecological issues that affect wellness.

08.0 DEMONSTRATE A KNOWLEDGE OF BASIC SCIENCE PRINCIPLES IN THE HEALTH CARE FIELD -- The student will be able to:

08.01 Describe the general plan of the human body and how it functions.
08.02 Describe how the principles of physical science, biology, and microbiology' such as the principles of gravity, vacuum, and retardation of growth of microorganisms apply within the health care industry.

09.0 PERFORM BASIC HEALTH CARE SKILLS -- The student will be able to:

09.01 Measure and record (graph) height, weight, and temperature, pulse and respiration (TPR).
09.02 Measure and record intake and output of body fluids.
09.03 Demonstrate medical aseptic technique by handwashing, gloving, and application of mask and gown.
09.04 Identify and perform correct body mechanics to prevent injuries to self and patient.
09.05 Demonstrate basic first aid skills.
09.06 Demonstrate personal comfort measures to include skin care, bed bath, bedmaking, mouth care.
09.07 Demonstrate safe patient transfer techniques.
09.08 Demonstrate positioning of body in proper alignment.
09.09 Demonstrate how to instruct patient in safe use of assisting devices such as walker, crutches, cane, etc.

10.0 DEMONSTRATE OCCUPATIONAL SAFETY -- The student will be able to:

10.01 Describe occupational safety issues that relate to the employer, employee, and the patient in the health care setting.
10.02 List and/or demonstrate health safety habits that will prevent injury to health care workers, co-workers, and patients.
10.03 Describe the importance of following safety instructions.
10.04 Identify poisons and hazardous materials commonly found in the

occupational area and describe how they are controlled.
10.05 Describe the importance of fire safety including prevention and evacuation.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

COURSE TITLE: Medical Skills and Services

CODE NUMBER: Secondary 8400320 Postsecondary ______

Florida CIP 0317.9997PA

SECONDARY SCHOOL CREDITS 1 COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____ 7-9 x 9-12 ____ Postsecondary Adult Vocational

______ Postsecondary Vocational x Other 30, 31

CERTIFICATION COVERAGE:
NURSING ED @ 5
TEC X RAY @7 G
LAB TEC @7 G
PH THERTEC @7 G
RESP TEC @7 G
PRAC NURSE @7 G
DENTL ASST @7 G
RESP THER @7 G
LAB ASST @7 G
PARAMEDIC @7 G
TEC MED @7 G
MED RECTEC @7 G
MENT HEAL @7 G
MED ASST @7 G
OC THER AS @7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide students with practical generic competencies related to health decisions all individuals will make during their lifetime.

The content includes, but is not limited to communication, adaptations of health principles to homes, identification of rights and responsibilities of individuals in health and disease, safety in carrying out medical instructions, identification of important wellness principles, control of hazards in the home, community health services provided, legal aspects for the health consumer, stress, and the role of the computer in the health care industry.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities contribute to the development of skills. Demonstrations and return demonstrations provide students with an understanding of correct procedure methods and enhance learning. Special project assignments are utilized.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction is not appropriate for this course.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

1. Describe the services provided by health occupations career clusters.
2. Demonstrate common health skills by written, oral or performance evaluations .
3. Explain your personal role in Disease Prevention and Maintenance of Health.
4. Explain the varied aspects of safety, related to the home environment.

5. Discuss legal aspects for the health consumer.
6. Develop a personal conditioning plan for fitness and sports.
7. Identify the body systems and their functions.
8. Discuss stress and its effect on the individual.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8400320

COURSE TITLE: Medical Skills & Services POSTSECONDARY NUMBER: ______

01.0 DESCRIBE THE SERVICES PROVIDED BY HEALTH OCCUPATIONS CAREER CLUSTERS -- The student will be able to:

01.01 Discuss the history of health care.
01.02 Identify the basic components of the health care delivery system.
01.03 List at least 3 types of services provided by the following career clusters:

- a. Health Care Planning and delivery system.
- b. Dental services.
- c. Diagnostic services.
- d. Mental Health services.
- e. Nursing and Nursing related services.
- f. Ophthalmic services.
- g. Rehabilitation services.
- h. Therapeutic services.
- i. Emergency Medical Services.
- j. Health Information and communication.
- k. Physicians and medically related services.
- l. Medical instrumentation.
- m. Environmental services.
- n. Animal Health services.

01.04 List at least two occupations for each cluster.
01.05 Identify services provided by other health care agencies.

02.0 DEMONSTRATE COMMON HEALTH SKILLS BY WRITTEN, ORAL OR PERFORMANCE EVALUATIONS -- The student will be able to:

02.01 Perform proper handwashing techniques.
02.02 Take and record temperature, pulse, respiration and blood pressure.
02.03 Take and record height and weight.
02.04 Convert common weights, measures and volumes to metric.
02.05 Demonstrate standard first aid procedures.
02.06 Demonstrate CPR and choking maneuver.
02.07 Demonstrate effective communication skills.
02.08 Recognize verbal and non-verbal barriers to communication.
02.09 Demonstrate safe transport and transfer techniques in the home and in emergency situations.
02.10 Define, pronounce and spell common medical terms and abbreviations necessary to safely carry out medical instructions.
02.11 Demonstrate the use of good body mechanics.

03.0 EXPLAIN YOUR PERSONAL ROLE IN DISEASE PREVENTION AND MAINTENANCE OF HEALTH -- The student will be able to:

03.01 Identify his/her rights and responsibilities as a patient.
03.02 Identify criteria useful in choosing health care products or services.
03.03 Describe the body's lines of defense against disease.
03.04 Describe practices to promote good health.
03.05 Identify required immunizations for children, adults and pets.
03.06 Recognize the direct relationship between environmental problems and community health.

04.0 EXPLAIN THE VARIED ASPECTS OF SAFETY, RELATED TO THE HOME ENVIRONMENT

-- The student will be able to:

04.01 Assemble a first aid kit using materials and supplies commonly found in the home.
04.02 Adapt basic medical aseptic procedures to the home situation to control the spread of disease.
04.03 Explain the importance of following medical instructions.
04.04 Discuss control of poisons and hazardous materials commonly found in the home.
04.05 Develop a plan for fire safety in the home, including prevention and evacuation.

05.0 DISCUSS LEGAL ASPECTS FOR THE HEALTH CONSUMER

-- The student will be able to:

05.01 Explain how the "Good Samaritan" Law protects the first responder in emergency situations.
05.02 Define the "Living Will."
05.03 Discuss legal procedures for donating organs.
05.04 List identification techniques used in forensic science.

06.0 DEVELOP A PERSONAL CONDITIONING PLAN FOR FITNESS

-- The student will be able to:

06.01 Define the basic components of proper nutrition.
06.02 Describe the benefits of exercise and weight control.
06.03 Identify factors to be considered in the selection of exercise.
06.04 Distinguish between fact and fallacy in selecting a diet for fitness.

07.0 IDENTIFY THE BODY SYSTEMS AND THEIR FUNCTIONS

-- The student will be able to:

07.01 Discuss the general overview of the body.
07.02 Describe the individual body systems and their functions.

08.0 DISCUSS STRESS AND ITS EFFECT ON THE INDIVIDUAL

-- The student will be able to:

08.01 Define stress.
08.02 Discuss individual differences in reacting to stressors.
08.03 Identify manifestations of negative reactions to stress.
08.04 Discuss various crises intervention services available in the local community.

CURRICULUM FRAMEWORK
PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION
EFFECTIVE DATE: July, 1993

COURSE TITLE: Practical Health Skills I

CODE NUMBER: Secondary 8400310 Postsecondary _______

Florida CIP 0317.9999PA

SECONDARY SCHOOL CREDITS 0.5
COLLEGE CREDITS ____
POSTSECONDARY ADULT VOCATIONAL CREDITS ____

APPLICABLE LEVEL(S): _____7-9 x 9-12 _____ Postsecondary Adult Vocational

______ Postsecondary Vocational x Other 30, 31

CERTIFICATION COVERAGE:
NURSING ED @5
TEC X-RAY @7 G
LAB TEC @7 G
PH THERTEC @7 G
RESP TEC @7 G
OC THER AS @7 G
DENTAL HYG @5
DENTL ASST @7 G
RESP THER @7 G
LAB ASST @7 G
PARAMEDIC @7 G
TEC MED @7 G
PRAC NURSE @7 G
MED RECTEC @7 G
MENT HEAL @7 G
MED ASST @7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide students with practical generic skills in health occupations which, though applicable to some health occupations, are not designed to prepare students for entry into a specific occupation.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this course to enhance learning.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Perform first aid.
02. Distinguish between mental health and mental illness.
03. Perform basic health skills.
04. Identify with medical specialities.
05. Recognize the importance of personal health.
06. Identify the needs of the terminally ill.
07. Recognize the importance of employability skills related to health occupations.
08. Demonstrate responsible consumer decision making regarding health screening and health care management.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8400310

COURSE TITLE: Practical Health Skills I POSTSECONDARY NUMBER: _______

01.0 PERFORM FIRST AID -- The student will be able to:

01.01 Recognize airway obstruction and take proper action.
01.02 Describe wounds and their treatment.
01.03 Identify shock and treatment.
01.04 Recognize types of poisoning and treatment.
01.05 Identify classifications of burns and their approrpriate treatment.
01.06 Describe ill effects of heat and cold.
01.07 Demonstrate treatment for head injury and internal injury.
01.08 Describe treatment for infection, tetanus, and animal bites.
01.09 Demonstrate immobilization for suspected fractures and spinal cord injuries.
01.10 Administer first aid for heart attack, apoplexy, fainting and epilepsy, and diabetic reactions.
01.11 Describe first aid of foreign objects-in the eye, ear, air passages, and food passages.
01.12 Perform rescue and transfer of victim.
01.13 Determine when a doctor's care is necessary.
01.14 Report an accident.
01.15 Identify modes of transmissions of disease.
01.16 Explain medical asepsis.
01.17 Recognize pallor and cyanosis and take appropriate action.

02.0 DISTINGUISH BETWEEN MENTAL HEALTH AND MENTAL ILLNESS -- The student will be able to:

02.01 Define the concepts of good mental health.
02.02 Explain the relationship between mental and physical health.
02.03 Recognize common characteristics possessed by mature individuals.
02.04 Explain the stages of emotional development.
02.05 Recognize deviant behavior.
02.06 Discuss child and spouse abuse.
02.07 Identify mental health agencies and resources.
02.08 Define mental retardation and list the causes.

03.0 PERFORM BASIC HEALTH SKILLS -- The student will be able to:

03.03 Perform proper handwashing.
03.02 Demonstrate vital signs procedure and recognize deviation from normal.
03.03 Demonstrate use of a weight scale.
03.04 Measure and record weight in metric and apothecary systems.
03.05 Measure and record height in apothecary and metric systems.

04.0 IDENTIFY WITH MEDICAL SPECIALITIES -- The student will be able to:

04.01 Identify physician specialists and their titles.
04.02 Choose a physician, dentist, hospitals, and a pharmacy according to individual needs.

05.0 RECOGNIZE THE IMPORTANCE OF PERSONAL HEALTH -- The student will be able to:

05.01 Describe risk factors that predispose one to illness.
05.02 Describe five stages of human growth.
05.03 Identify the components of good nutrition.

06.0 IDENTIFY THE NEEDS OF THE TERMINALLY ILL -- The student will be able to:

06.01 Discuss death and dying.
06.02 Define stages of grief.
06.03 Describe mortuary science.
06.04 Discuss and describe services provided by funeral directors/funeral homes.

07.0 RECOGNIZE THE IMPORTANCE OF EMPLOYABILITY SKILLS RELATED TO HEALTH OCCUPATIONS -- The student will be able to:

07.01 Discuss the demanding time schedule expected of the health care worker (24 hrs/day, 7 days/week, 52 weeks/year).
07.02 Identify factors that explain why health occupations are emotionally and physically demanding.
07.03 Discuss the need for good attendance and punctuality for the health care worker.
07.04 Discuss the difference between constructive and non-constructive criticism.

08.0 DEMONSTRATE RESPONSIBLE CONSUMER DECISION MAKING REGARDING HEALTH SCREENING AND HEALTH CARE MANAGEMENT -- The student will be able to:

08.01 List ways one can obtain health screening/physical exams.
08.02 Demonstrate Vision Screening.
08.03 Demonstrate ability to test for hearing.
08.04 Demonstrate ability to test reflexes.
08.05 Demonstrate ability to perform dental hygiene.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

COURSE TITLE: Practical Health Skills II

CODE NUMBER: Secondary 8400330 Postsecondary _____

Florida CIP 0317.9998PA

SECONDARY SCHOOL CREDITS 0.5 COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): ____ 7-9 x 9-12 ____ Postsecondary Adult Vocational

_____ Postsecondary Vocational x Other 30, 31

CERTIFICATION COVERAGE:
TEC MED @ 7
PRAC NURSE @ 7 G
MED RECTEC @ 7 G
MENT HEAL @ 7 G
MED ASST @ 7 G
NURSING ED @ 5
TEC X RAY @ 7 G
LAB TEC @ 7 G
PH THERTEC @ 7 G
RESP TEC @ 7 G
OC THER AS @ 7 G
DENTAL HYG @ 5
DENTL ASST @ 7 G
RESP THER @ 7 G
LAB ASST @ 7 G
PARAMEDIC @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide students with practical life and health management skills.

Students would be introduced to concepts that promote understanding of one's responsibility for decision making in their emotional development and physical well-being.

II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this course to enhance learning.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Perform basic communication skills.
02. Demonstrate the application of principles of nutrition.
03. Identify factors that affect emotional development.
04. Demonstrate responsible consumer decisions in the use of alcohol, drugs and tobacco.
05. Perform the Heimlich Maneuver and CPR.
06. Demonstrate knowledge of immune-deficiency diseases, including AIDS.
07. Implement a program of personal health assessment.
08. Identify factors relating to consumer health.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8400330

COURSE TITLE: Practical Health Skills II POSTSECONDARY NUMBER: ____

01.0 PERFORM BASIC COMMUNICATION SKILLS -- The student will be able to:

01.01 Demonstrate examples of verbal and non-verbal communication.
01.02 Discuss negative and positive values of defense mechanisms.
01.03 Demonstrate ability to follow written and oral directions.

02.0 DEMONSTRATE THE APPLICATION OF PRINCIPLES OF NUTRITION -- The student will be able to:

02.01 Plan a balanced diet recognizing the nutritional needs of different age groups.
02.02 Discuss the special nutritional needs of a person with medical disorders.
03.03 Describe eating disorders.

03.0 IDENTIFY FACTORS THAT AFFECT EMOTIONAL DEVELOPMENT -- The student will be able to:

03.01 Discuss how physical factors influence emotional behavior.
03.02 Discuss how personal values and goals can be influenced by socio-economic condtions.
03.03 Discuss the origin and management of stress.
03.04 Discuss the relationship of suicide to depression.

04.0 DEMONSTRATE RESPONSIBLE CONSUMER TECHNIQUES REGARDING ALCOHOL, DRUGS, AND TOBACCO -- The student will be able to:

04.01 Explain the health consequences of using chemical substances to the individual, family and community.
04.02 Discuss use versus abuse of chemical substances.
04.03 List signs of drug dependency/abuse.
04.04 Discuss misuse of over the counter drugs.
04.05 Identify methods used in Stop Smoking Programs.

05.0 PERFORM THE HEIMLICH MANEUVER AND CPR -- The student will be able to:

05.01 Recognize airway obstruction.
05.03 Administer CPR.
05.04 Recognize signs of choking.
05.05 Administer Heimlich Maneuver.

06.0 DEMONSTRATE KNOWLEDGE OF IMMUNE DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

06.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
06.02 Identify community resources and services available to the victims of immune-deficiency diseases.
06.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
06.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to patients, following Centers for Disease Control (CDC) guidelines.
06.05 Demonstrate knowledge of the legal aspect of AIDS.

07.0 IMPLEMENT A PROGRAM OF PERSONAL HEALTH ASSESSMENT -- The student will be able to:

07.01 Recognize the seven warning signs of cancer.

07.02 Perform breast self-examination (girls). Perform testicle self-examination (boys).

08.0 IDENTIFY FACTORS RELATING TO CONSUMER HEALTH
-- The student will be able to:

08.01 Define and discuss "Medical Consumerism."
08.02 Define and discuss "Generic", over the counter, and brand name prescription drugs.
08.03 Select insurance policy and health maintenance organization.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Applied Medical Science

CODE NUMBER: Secondary 8415400 Postsecondary ______

Florida CIP 0317.029902

SCHOOL CREDITS 3 COLLEGE CREDITS ______ VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____ 7-9 X 9-12 ____ Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE:
LAB TEC @7 G
LAB ASST @7 G
RESP THER @7 G
PH THERTEC @7 G
PARA MEDIC @7 G
RESP TEC @7 G
PRAC NURSE @7 G
PH THERAPH @ 6
TEC X RAY @7 G
OC THER AS @7 G

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare a student for employment as an allied health aide (66005437), medical laboratory assistant (32905210) (078.381-010), occupational therapy aide (355.377-010), physical therapy aide (355.354-010), respiratory therapy aide or radiologic aide or to provide supplemental training for persons previously or currently employed in these occupations or to pursue further education in the health care industry.

The content includes, but is not limited to, communication, interpersonal and professional skills, appropriate scientific principles of microbiology, chemistry, physics, anatomy and physiology integrated into representative skills performed by major health care workers in the clinical setting.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction, applied laboratory procedures or practice and clinical experience.

Listed below are the courses that comprise this program when offered at the secondary level:

8415410	Applied Medical Science 1
8415420	Applied Medical Science 2
8415430	Applied Medical Science 3

II. **LABORATORY ACTIVITIES**: Students will perform skills representative of at least, but not limited to, three areas of allied health care in the laboratory and clinical settings. Major areas of allied health are defined as physical therapy, emergency, radiation, laboratory and respiratory medicine, and occupational therapy. Other areas of medicine and dentistry may be included. Clinical experience is defined as activities performed in the clinical setting under the supervision of a health professional duly certified/licensed in the selected occupational fields. Team teaching between teachers of anatomy and physiology and health occupations instructors is encouraged.

III. **SPECIAL NOTE**: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0, and Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

The typical length of this program for the average achieving student is 450 clock hours.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Apply basic math skills.
02. Apply basic science skills.
03. Demonstrate knowledge of the health care delivery system and health occupations.
04. Demonstrate the ability to communicate and use interpersonal skills effectively in both clinical and classroom activities.
05. Demonstrate skills and knowledge of legal and ethical behavior in clinical settings.
06. Demonstrate an understanding of and apply wellness and disease concepts.
07. Recognize and practice safety and security procedures in clinical settings.
08. Recognize and respond to emergency situations.
09. Recognize and practice infection control procedures.
10. Demonstrate computer literacy and computational skills.
11. Demonstrate employability skills.
12. Perform skills representative of at least three major allied health areas in the school laboratory before beginning the clinical phase.
13. Successfully complete a clinical rotation in at least 3 major allied health areas by demonstrating competency of selected occupational skills.
14. Identify anatomic structure and function of body systems in relation to the effect of diseases and services performed by allied health workers.
15. Demonstrate knowledge of immune-deficiency diseases, and including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8415400

PROGRAM TITLE: Applied Medical Science POSTSECONDARY NUMBER: ______

01.0 APPLY BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, analyze and report on graphs, charts and tables.
01.02 Measure time, temperature, distance, capacity and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Make estimates and judge the reasonableness of the result.

02.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Evaluate and draw conclusions.

03.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

03.01 Identify the basic components of the health care delivery system.
03.02 Describe the various types of health care facilities and the range of services.
03.03 Describe the composition and functions of a health care team.
03.04 Identify the general roles and responsibilities of the individual members of the health care team.
03.05 Explain the importance of maintaining professional competence through continuing education.
03.06 Describe trends affecting the delivery of health care, including health insurance issues, accountability, infection control, multi-competency issues, and intense patient acuity.

04.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY IN BOTH CLINICAL AND CLASSROOM ACTIVITIES -- The student will be able to:

04.01 Develop basic listening and observational skills.
04.02 Identify characteristics of successful and unsuccessful communication.
04.03 Respond to verbal and non-verbal clues.
04.04 Compose written communication using correct spelling, grammar and format.
04.05 Use appropriate medical terminology.
04.06 Demonstrate courtesy and respect for patients and other health care workers in person and by telephone.
04.07 Instruct patients regarding health care policies and practices.
04.08 Adapt communication skills to varied levels of understanding and cultural orientation.

05.0 DEMONSTRATE SKILLS AND KNOWLEDGE OF LEGAL AND ETHICAL BEHAVIOR -- The student will be able to:

05.01 Demonstrate knowledge of the legal framework governing the health professions.
05.02 Explain the medical liability of health care workers.
05.03 Explain the patient's "Bill of Rights" and demonstrate behavior that enforces the privileges of the patient.
05.04 Describe a Code of Ethics consistent with the expectations of major allied health care fields.
05.05 Maintain confidentiality of information concerning patients.
05.06 Recognize the limits of authority and responsibility of health

care workers including grounds for disciplinary action.
05.07 Recognize illegal and unethical practices of health care workers.
05.08 Describe the protection offered by the "Good Samaritan" law.

06.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

06.01 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
06.02 Identify psychological, sociological, and cultural reactions to illness.
06.03 Develop a basic understanding of human needs throughout the lifespan.
06.04 Explain basic concepts of wellness and stress.
06.05 Develop a wellness and stress control plan that can be used in his/her personal and professional life.

07.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

07.01 Demonstrate the safe use of medical equipment.
07.02 Recognize and report safety hazards.
07.03 Identify and practice security procedures for medical supplies and equipment.
07.04 Demonstrate proper body mechanics.
07.05 Demonstrate the procedure for properly identifying patients.
07.06 Demonstrate procedures for the safe transport and transfer of patients.

08.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

08.01 Monitor vital signs.
08.02 Describe legal parameters relating to the administration of emergency care.
08.03 Demonstrate the ability to perform CPR.
08.04 Perform first aid.
08.05 Demonstrate ability to perform the Heimlich maneuver.

09.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

09.01 Demonstrate knowledge of medical and surgical asepsis.
09.02 Describe how to correctly dispose of biohazardous materials according to appropriate governmental guidelines.
09.03 Identify factors relating to the transmission of infectious disease, including AIDS.
09.04 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
09.05 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
09.06 Demonstrate knowledge of universal precautions.

10.0 DEMONSTRATE COMPUTER LITERACY AND COMPUTATIONAL SKILLS -- The student will be able to:

10.01 Define terms and demonstrate an understanding of concepts related to computers.
10.02 Describe the uses of computers in the allied health occupation being studied.
10.03 Demonstrate computational, keyboarding and retrieval skills relevant to job requirements of the health occupations being studied.
10.04 Demonstrate computer skills in each clinical rotation.

11.0 **DEMONSTRATE EMPLOYABILITY SKILLS** -- The student will be able to:

11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application form properly.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify and demonstrate appropriate responses to criticism from an employer, a supervisor, and other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.
11.10 Identify an allied health career and an aide level job which meet personal goals.

12.0 **PERFORM SKILLS REPRESENTATIVE OF AT LEAST THREE MAJOR ALLIED HEALTH AREAS IN THE SCHOOL LABORATORY BEFORE BEGINNING THE CLINICAL PHASE** -- The student will be able to:

12.01 If clinical laboratory science is one of the selected allied health areas to be taught, students will:
  12.0101 Correctly pipet using automatic and manual pipette. Note: OSHA prohibits mouth pipetting!
  12.0102 Perform dip stick testing on blood and urine.
  12.0103 Type blood samples.
  12.0104 Prepare blood slides for differential blood count.
  12.0105 Stain blood slides.
  12.0106 Plate microbiological speciman on appropriate media.
  12.0107 Report urine specific gravity, color and characteristics.
  12.0108 Perform centrifuge operation and maintenance.
  12.0109 Focus a microscope and examine specimens using low, high-dry, and oil immersion lens.
  12.0110 Demonstrate knowledge of specimen differentiation and procedure interferances.
  12.0111 Perform communication skills specifically related to laboratory science.
  12.0112 Using an artificial arm, perform venipunctures.
  12.0113 Name and discuss the avenues of laboratory medicine practice.
12.02 If physical therapy is one of the selected allied health areas to be taught, students will:
  12.0201 Describe the functions of bones and muscles as related to the practice of physical therapy.
  12.0202 Define disability.
  12.0203 Name and discuss the avenues of physical therapy practice.
  12.0204 Describe equipment used in physical therapy.
  12.0205 Teach crutch and walker use and care.
  12.0206 Perform safe body mechanics and transfer techniques.
  12.0207 Describe the use of modalities (i.e. Ultrasound)
  12.0208 Perform and instruct range of motion exercises.
  12.0209 Perform hydrotherapy.
  12.0210 Perform communication skills specifically related to physical therapy.
12.03 If occupational therapy is one of the selected allied health areas to be taught, students will:
  12.0301 Describe equipment used in occupational therapy.
  12.0302 Make splints.
  12.0303 Perform feeding and dressing skills using adaptive equipment.
  12.0304 Perform feeding and dressing skills using one hand.
  12.0305 Perform communication skills specifically related to occupational therapy.
  12.0306 Perform and instruct range and motion exercises.
  12.0307 Name and discuss the avenues of physical therapy practice.

12.04 If respiratory therapy is one of the selected allied health areas to be taught, students will:
12.0401 Ausculate the chest with stethoscope.
12.0402 Instruct patients on the use of incentive spirometers.
12.0403 Differentiate between various oxygen delivery devices (nasal cannulas, mask, oxyhood, endotracheal tubes, etc.)
12.0404 Stock shelves with oxygen delivery equipment.
12.0405 Position patients for postural drainage.
12.0406 Perform chest physiotherapy.
12.0407 Obtain oxygen and oxygen saturation and heart rate values with a pulse oximeter.
12.0408 Give aerosol treatments.
12.0409 Set up basic oxygen delivery devices.
12.0410 Using an artificial arm, perform arterial puncture for blood gas.
12.05 If medical record keeping is one of the selected allied health areas to be taught, students will:
12.0501 Demonstrate an understanding of basic medical terminology e.g. prefixes, suffixes and root words related to major body systems.
12.0502 Demonstrate an understanding of straight numerical, alphabetical and terminal digit filing.
12.0503 Demonstrate computer literacy, keybording and retrieval skills.
12.06 If Radiologic Technology is one of the selected allied health areas to be taught, students will:
12.0601 Identify the function of a cassette, film, and screen.
12.0602 Describe how radiation produces an image on film.
12.0603 Identify the process by which x-ray film is developed.
12.0604 Process a film through an automatic processor.
12.0605 Identify anatomical position and terminology related to position (supine, prone, proximal, distal, medial, lateral, superior, inferior, anterior/ventral, and posterior/dorsal).
12.0606 Identify patient properly (check identification band, etc.)
12.0607 Explain appropriate exam(s) to the patient.
12.0608 Perform safe body mechanics and transfering skills of patient onto x-ray table.
12.0609 Position patient for exam(s) (chest, KUB, hand and foot).
12.0610 Position x-ray tube to simulate exposure for exam(s) (chest, KUB, hand and foot).
12.0611 Position patient in supine, prone, lateral, oblique, AP, PA of appropriate part.
12.0612 Use an artificial arm to perform venipuncture.

13.0 SUCCESSFULLY COMPLETE A CLINICAL ROTATION IN AT LEAST 3 MAJOR ALLIED HEALTH AREAS -- The student will be able to:

13.01 Master skills outlined in 10.0.
13.02 Complete three (3) clinical rotations under the supervision of a duly licensed/certified allied health care worker.
13.03 Exhibit behavior consistent with the professional ethics required of each of the allied health areas being studied.

14.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY ALLIED HEALTH WORKERS -- The student will be able to:

14.01 Identify anatomic structure and function of body systems.
14.02 Perform skills related to the body systems.
14.03 Identify health careers related to the body systems.
14.04 Identify conditions and diseases related to each body system.
14.05 Identify health factors which affect optimal functions of the body systems.

15.0 DEMONSTRATE KNOWLEDGE OF IMMUNE DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
15.02 Identify community resources and services available to the victims of immune-deficiency diseases.
15.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
15.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations COURSE CREDIT: 1
PROGRAM TITLE: Applied Medical Science PROGRAM NUMBER: 8415400
COURSE TITLE: Applied Medical Science 1 COURSE NUMBER: 8415410

COURSE DESCRIPTION: This course prepares students with communication, interpersonal relations, career development, legal and ethical, emergency medical, and computer literacy skills, and information about immune-deficiency diseases (AIDS) in preparation for learning specific occupational skills in Applied Medical Science 2.

01.0 APPLY BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, analyze and report on graphs, charts and tables.
01.02 Measure time, temperature, distance, capacity and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Make estimates and judge the reasonableness of the result.

02.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Evaluate and draw conclusions.

03.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

03.01 Identify the basic components of the health care delivery system.
03.02 Describe the various types of health care facilities and the range of services.
03.03 Describe the composition and functions of a health care team.
03.04 Identify the general roles and responsibilities of the individual members of the health care team.

04.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY IN BOTH CLINICAL AND CLASSROOM ACTIVITIES -- The student will be able to:

04.01 Develop basic listening and observational skills.
04.02 Identify characteristics of successful and unsuccessful communication.
04.03 Respond to verbal and non-verbal information.
04.04 Compose written communication using correct spelling, grammar and format.

05.0 DEMONSTRATE SKILLS AND KNOWLEDGE OF LEGAL AND ETHICAL BEHAVIOR IN CLINICAL SETTINGS -- The student will be able to:

05.01 Demonstrate knowledge of the legal framework governing the health professions.
05.02 Explain the medical liability of health care workers.
05.04 Describe a Code of Ethics consistent with the expectations of major health care fields.
05.08 Describe the protection offered by the "Good Samaritan" law.

06.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

06.04 Explain basic concepts of wellness and stress.
06.05 Develop a wellness and stress control plan that can be utilized

in his/her personal and professional life.

08.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS
-- The student will be able to:

08.02 Describe legal parameters relating to the administration of emergency care.
08.03 Demonstrate the ability to perform CPR.
08.04 Perform first aid.
08.05 Demonstrate ability to perform the Heimlich maneuver.

10.0 DEMONSTRATE COMPUTER LITERACY AND COMPUTATIONAL SKILLS
-- The student will be able to:

10.01 Define terms and demonstrate an understanding of concepts related to computers.

15.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS
-- The student will be able to:

15.01 Distinguish between fact and fallacy about transmission and treatment of immune-deficiency diseases.
15.02 Identify community resources and services available to the victims of immune-deficiency diseases.
15.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
15.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations
COURSE CREDIT: 1
PROGRAM TITLE: Applied Medical Science
PROGRAM NUMBER: 8415400
COURSE TITLE: Applied Medical Science 2
COURSE NUMBER: 8415420

COURSE DESCRIPTION: This course prepares students to practice universal infection control, monitor vital signs, and skills representative of at least three major allied health areas in the school laboratory. The anatomy and physiology related to those skills will be stressed.

06.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS

-- The student will be able to:

06.01 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
06.02 Identify psychological, sociological, and cultural reactions to illness.
06.03 Develop a basic understanding of human needs throughout the lifespan.

08.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS

-- The student will be able to

08.01 Monitor vital signs.

09.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES

-- The student will be able to:

09.01 Demonstrate knowledge of medical and surgical asepsis.
09.02 Describe how to correctly dispose of biohazardous materials according to appropriate governmental guidelines.
09.03 Identify factors relating to the transmission of infectious disease, including AIDS and Hepatitis B.
09.04 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
09.05 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.

10.0 DEMONSTRATE COMPUTER LITERACY AND COMPUTATIONAL SKILLS

-- The student will be able to:

10.02 Describe the uses of computers in the allied health occupation being studied.

12.0 PERFORM SKILLS REPRESENTATIVE OF AT LEAST THREE MAJOR ALLIED HEALTH AREAS IN THE SCHOOL LABORATORY BEFORE BEGINNING THE CLINICAL PHASE

-- The student will be able to:

12.01 If clinical laboratory science is one of the selected allied health areas to be taught, students will:
    12.0101 Correctly pipet using automatic and manual pipets (no mouth pipetting).
    12.0102 Perform dip stick testing on blood and urine.
    12.0103 Type blood samples.
    12.0104 Prepare blood slides for differential blood count.
    12.0105 Stain blood slides.
    12.0106 Plate microbiological speciman on appropriate media.
    12.0107 Report urine specific gravity, color and character.
    12.0108 Perform centrifuge operation and maintenance.
    12.0109 Focus a microscope and examine specimens using low, high-dry, and oil immersion lens.

- 12.0110 Demonstrate knowledge of specimen differentiation and procedure interferances.
- 12.0111 Perform communication skills specifically related to laboratory science.
- 12.0112 Using an artificial arm, perform venipunctures.
- 12.0113 Name and discuss the avenues of laboratory medicine practice.

12.02 If physical therapy is one of the selected allied health areas to be taught, students will:

- 12.0201 Describe the functions of bones and muscles as related to the practice of physical therapy.
- 12.0202 Define disability.
- 12.0203 Name and discuss the avenues of physical therapy practice.
- 12.0204 Describe equipment used in physical therapy.
- 12.0205 Teach crutch and walker use and care.
- 12.0206 Perform safe body mechanics and transfer techniques.
- 12.0207 Describe the use of modalities (i.e. Ultrasound)
- 12.0208 Perform and instruct range of motion exercises.
- 12.0209 Perform hydrotherapy.
- 12.0210 Perform communication skills specifically related to physical therapy.

12.03 If occupational therapy is one of the selected allied health areas to be taught, students will:

- 12.0301 Describe equipment used in occupational therapy.
- 12.0302 Make splints.
- 12.0303 Perform feeding and dressing skills using adaptive equipment.
- 12.0304 Perform feeding and dressing skills using one hand.
- 12.0305 Perform communication skills specifically related to occupational therapy.
- 12.0306 Perform and instruct range and motion exercises.
- 12.0307 Name and discuss the avenues of physical therapy practice.

12.04 If respiratory therapy is one of the selected allied health areas to be taught, students will:

- 12.0401 Ausculate the chest with stethoscope.
- 12.0402 Instruct patients on the use of incentive spirometers.
- 12.0403 Differentiate between various oxygen delivery devices (nasal cannulas, mask, oxyhood, endotracheal tubes, etc.)
- 12.0404 Stock shelves with oxygen delivery equipment.
- 12.0405 Position patients for postural drainage.
- 12.0406 Perform chest physiotherapy.
- 12.0407 Obtain oxygen and oxygen saturation and heart rate values with a pulse oximeter.
- 12.0408 Give aerosol treatments.
- 12.0409 Set up basic oxygen delivery devices.
- 12.0410 Using an artificial arm, perform arterial puncture for blood gas.

12.05 If medical record keeping is one of the selected allied health areas to be taught, students will:

- 12.0501 Demonstrate an understanding of basic medical terminology e.g. prefixes, suffixes and root words related to major body systems.
- 12.0502 Demonstrate an understanding of straight numerical, alphabetical and terminal digit filing.
- 12.0503 Demonstrate computer literacy, keybording and retrieval skills.

12.06 If Radiologic Technology is one of the selected allied health areas to be taught, students will:

- 12.0601 Identify the function of a cassette, film, and screen.
- 12.0602 Describe how radiation produces an image on film.
- 12.0603 Identify the process by which x-ray film is developed.
- 12.0604 Process a film through an automatic processor.
- 12.0605 Identify anatomical position and terminology related to position (supine, prone, proximal, distal, medial,

lateral, superior, inferior, anterior/ventral, and posterior/dorsal).
12.0606 Identify patient properly (check identification band).
12.0607 Explain appropriate exam(s) to the patient.
12.0608 Perform safe body mechanics transfering skills of patient onto x-ray table.
12.0609 Position patient for exam(s) (chest, KUB, hand and foot).
12.0610 Position x-ray tube to simulate exposure for exam(s) (chest, KUB, hand and foot).
12.0611 Position patient in supine, prone, lateral, oblique, AP, PA of appropriate part.
12.0612 Use an artificial arm to perform venipuncture.

14.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY ALLIED HEALTH WORKERS -- The student will be able to:

14.01 Identify anatomic structure and function of body systems.
14.02 Perform skills related to the body systems.
14.03 Identify health careers related to the body systems.
14.04 Identify conditions and diseases related to each body system.
14.05 Identify health factors which affect optimal functions of the body systems.

STUDENT PERFORMANCE STANDARDS		**EFFECTIVE DATE:**	July, 1993
PROGRAM AREA:	Health Occupations	**COURSE CREDIT:**	1
PROGRAM TITLE:	Applied Medical Sciences	**PROGRAM NUMBER:**	8415400
COURSE TITLE:	Applied Medical Science 3	**COURSE NUMBER:**	8415430

COURSE DESCRIPTION: This course will encompass clinical rotation through at least 3 major allied health areas while under the supervision of a duly licensed/certified allied health worker. During the rotation, the students will excercise the skills learned in Applied Medical Science 1 and 2.

03.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

03.05 Explain the importance of maintaining professional competence through continuing education.
03.06 Describe trends affecting the delivery of health care, including health insurance issues, accountability, infection control, multi-competency issues, and intense patient acuity.

04.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY IN BOTH CLINICAL AND CLASSROOM ACTIVITIES -- The student will be able to:

04.05 Use appropriate medical terminology.
04.06 Demonstrate courtesy and respect for patients and other health care workers in person and by telephone.
04.07 Instruct patients regarding health care policies and practices.
04.08 Adapt communication skills to varied levels of understanding and cultural orientation.

05.0 DEMONSTRATE SKILLS AND KNOWLEDGE OF LEGAL AND ETHICAL BEHAVIOR IN CLINICAL SETTINGS -- The student will be able to:

05.03 Explain the patient's "Bill of Rights" and demonstrate behavior that enforces the privileges of the patient.
05.05 Maintain confidentiality of information concerning patients.
05.06 Recognize the limits of authority and responsibility of health care workers including grounds for disciplinary action.
05.07 Recognize illegal and unethical practices of health care workers.

07.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES IN CLINICAL SETTINGS -- The student will be able to:

07.01 Demonstrate the safe use of medical equipment.
07.02 Recognize and report safety hazards.
07.03 Identify and practice security procedures for medical supplies and equipment.
07.04 Demonstrate proper body mechanics.
07.05 Demonstrate the procedure for properly identifying patients.
07.06 Demonstrate procedures for the safe transport and transfer of patients.

09.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

09.06 Demonstrate knowledge of universal precautions established by appropriate authorities.

10.0 DEMONSTRATE COMPUTER LITERACY AND COMPUTATIONAL SKILLS -- The student will be able to:

10.03 Demonstrate computational, keyboarding and retrieval skills relevant to job requirements of the allied health occupations

being studied.
10.04 Demonstrate computer skills in each clinical rotation.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application form completely.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify and demonstrate appropriate responses to criticism from an employer, a supervisor, and other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.
11.10 Identify an allied health career and an aide level job which meet personal goals.

13.0 SUCCESSFULLY COMPLETE A CLINICAL ROTATION IN AT LEAST 3 MAJOR ALLIED HEALTH AREAS -- The student will be able to:

13.01 Master skills outlined in 12.0.
13.02 Complete three (3) clinical rotations under the supervision of a duly licensed/certified allied health care worker.
13.03 Exhibit behavior consistent with the professional ethics required of each of the allied health areas being studied.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Basic X-Ray Machine Operator

CODE NUMBER: Secondary _______ Postsecondary H170209

Florida CIP 0317.020902

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____7-9 _____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: TEC X-RAY @7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as basic x-ray machine operators (32921221) or to provide supplemental training for persons previously or currently employed in this occupational area.

The content includes, but is not limited to, patient care, radiation protection, patient positioning, radiographic equipment and accessories, image production and evaluation, administrative and personal competence, and communication and employability skills. Legal and ethical responsibilities, health-illness concepts, emergency procedures including CPR, first aid, safety and security procedures, medical terminology, and anatomy and physiology are basic to all health occupation programs.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Simulation exercises and laboratory activities should be provided using energized radiographic equipment and facilities. Special emphasis should be placed on radiation protection, patient positioning, and image quality. Clinical learning experiences in a radiographic room and related accessories must be an integral part of this program. All clinical experience must be under the direct supervision of a licensed practitioner.

III. SPECIAL NOTE: Health Occupations Students of America, Inc. is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students should be encouraged to belong to their professional association.

The program sponsor should be familiar with the guidelines and requirements of a limited radiography program developed by the Joint Review Committee on Education in Radiologic Technology. Program completers will be eligible to take the Florida certification examnation administered by the Florida Department of Health and Rehabilitative Services. Florida requires licensing of Basic X-Ray Machine Operators by the DHRS. Articulation into the Radiography program should be considered in planning this program.

The cooperative method on instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and classroom instruction experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 240.149 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 10.0, Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 600 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Provide patient care.
02. Provide radiation protection to patient, self and others.
03. Position patient.
04. Operate and maintain radiographic equipment/accessories.
05. Process radiographic film.
06. Evaluate x-ray film quality.
07. Perform managerial activities.
08. Develop personal/professional competence.
09. Demonstrate communication skills.
10. Demonstrate knowledge of immune-deficiency diseases, including AIDS.
11. Demonstrate employability skills.
12. Demonstrate knowledge of the health care delivery system and health occupations.
13. Demonstrate an understanding of and apply wellness and disease concepts.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ____

PROGRAM TITLE: Basic X-Ray Machine Operator POSTSECONDARY NUMBER: H170209

01.0 PROVIDE PATIENT CARE -- The student will be able to:

01.01 Confirm patients' identification (check identification band, etc).
01.02 Explain radiographic procedure(s) to patient.
01.03 Interview patients for possible sensitivity to contrast media.
01.04 Provide for patients' comfort.
01.05 Preserve patients' dignity and privacy.
01.06 Move patient from a wheel chair to the radiographic table and back.
01.07 Move patient from a stretcher to the radiographic table and back.
01.08 Move patient from a chair to the radiographic table and back.
01.09 Check integrity of all equipment attached to patients.
01.10 Use sterile techniques.
01.11 Prepare patients properly for radiograph/contrast media examinations.
01.12 Select contrast media equipment.
01.13 Prepare contrast media.
01.14 Assist physician in administering contrast media.
01.15 Identify and report patient reaction to contrast media.
01.16 Address the needs of elderly patients.
01.17 Address the needs of pediatric patients.
01.18 Address the needs of trauma patients.
01.19 Address the needs of handicapped patients.
01.20 Take and record patient's vital signs.
01.21 Use aseptic techniques.
01.22 Attend to post-examination needs of patients.
01.23 Identify emergency situations.
01.24 Perform basic first aid procedures.
01.25 Recognize and report symptoms of abuse and neglect to appropriate authorities.

02.0 PROVIDE RADIATION PROTECTION TO PATIENTS, SELF AND OTHERS -- The student will be able to:

02.01 Explain biological effects of ionizing radiation.
02.02 Question female patients concerning the possibility of pregnancy.
02.03 Identify and select proper Pb shielding (gonadal, thyroid, eye).
02.04 Select appropriate film/screen combination (fastest without compromising quality of image).
02.05 Determine shortest possible exposure time.
02.06 Identify and use personnel radiation monitoring devices properly.
02.07 Identify and select proper immobilization/protective devices.
02.08 Stand behind protective barrier during exposure.
02.09 Secure the area prior to taking radiograph.
02.10 Minimize repeat radiographs.
02.11 Identify and use the principles of time, distance, and shielding.
02.12 Utilize collimation/restriction of primary x-ray beam, to limit the area being exposed by radiation.

03.0 POSITION PATIENT -- The student will be able to:

03.01 Identify the anatomy and physiology of the part to be radiographed.
03.02 Locate the anatomical landmarks and utilize the appropriate landmarks when doing radiographs.

03.03 Apply immobilization devices.
03.04 Apply positioning aids (sponges, compression bands, film/cassette holders, tape, etc.).
03.05 Apply lead blockers/strips/shields.
03.06 Position patients for radiographs of the upper and lower extremities.
03.07 Position patients for abdominal area radiographs.
03.08 Position patients for spinal radiographs.
03.09 Position patients for skull radiographs.
03.10 Position patients for contrast media radiographs.
03.11 Position patients for foreign body localization.
03.12 Position patients for chest radiographs.

04.0 OPERATE AND MAINTAIN RADIOGRAPHIC EQUIPMENT/ACCESSORIES -- The student will be able to:

04.01 Activate equipment (properly warm-up x-ray tube to prevent damage).
04.02 Select appropriate film/screen combinations.
04.03 Select appropriate film holder size and type of cassette (i.e. 8X10/10X12, screen/grid, etc).
04.04 Apply correct lead markers (Lt, Rt, upright, decub, etc.) prior to exposure.
04.05 Place cassette appropriately.
04.06 Adjust radiographic tables.
04.07 Set proper radiographic tube distance.
04.08 Set collimator.
04.09 Consult technique chart.
04.10 Select bucky/non-bucky control.
04.11 Set kV control.
04.12 Set mA control.
04.13 Set timer control.
04.14 Take radiographs.
04.15 Remove exposed film holder to protected area.
04.16 Clean radiographic tables.
04.17 Store unexposed film properly (open and closed boxes of film).
04.18 Clean film holders, including screens.
04.19 Replace collimator light bulb.
04.20 Identify and report basic radiographic equipment malfunctions.
04.21 Organize, maintain cleanliness, and keep radiographic room adequately stocked with necessary supplies.

05.0 PROCESS RADIOGRAPHIC FILM -- The student will be able to:

05.01 Clean tanks periodically.
05.02 Mix chemicals properly.
05.03 Check and set developer temperature.
05.04 Select developing time.
05.05 Secure developing room (free of light leaks).
05.06 Remove film from film cassette properly.
05.07 Place patient identification on film.
05.08 Place film on hanger.
05.09 Insert film in processing chemicals in correct sequence.
05.10 Dry film.
05.11 Perform daily maintenance for automatic processor.
05.12 Start up automatic processor.
05.13 Insert exposed film into automatic processor.
05.14 Reload and store cassettes properly.
05.15 Remove dry film.
05.16 Identify and report film processor malfunctions.

06.0 EVALUATE X-RAY FILM QUALITY -- The student will be able to:

06.01 Place film anatomically correct on view box.
06.02 Determine image sharpness.
06.03 Determine proper contrast.
06.04 Determine proper density.

06.05 Evaluate anatomical positioning.
06.06 Identify artifacts of film and their possible causes.
06.07 Confirm patient identification on film.
06.08 Confirm anatomical areas with Pb markers (exposed on film).
06.09 Review film with supervisor.
06.10 Identify possible causes of radiographic errors.
06.11 Verify proper number of films and anatomical positions radiographed.

07.0 PERFORM MANAGERIAL ACTIVITIES -- The student will be able to:

07.01 Order radiographic supplies.
07.02 Order office/clerical supplies.
07.03 File radiographic reports.
07.04 Maintain radiographic film files.
07.05 Schedule patients' examinations.
07.06 Prepare and process incident reports.
07.07 Demonstrate knowledge of basic computer skills.
07.08 Call and/or send radiographic report(s) to appropriate personnel.
07.09 Prepare and process x-ray requisitions properly.

08.0 DEVELOP PERSONAL/PROFESSIONAL COMPETENCE -- The student will be able to:

08.01 Maintain CPR certification.
08.02 Identify ways to keep current in technological developments.
08.03 Interpret and comply with standard operating procedures.
08.04 Reflect a positive/professional attitude.
08.05 Comply with ethical standards in medical practice.
08.06 Maintain patient confidentiality.
08.07 Comply with legal standards.
08.08 Comply with state regulations.
08.09 Determine personal liability needs.
08.10 Maintain professional standards.
08.11 Practice proper body mechanics.

09.0 DEMONSTRATE COMMUNICATION SKILLS -- The student will be able to:

09.01 Establish patient rapport.
09.02 Maintain interpersonal communications with co-workers.
09.03 Confirm doctor's verbal orders.
09.04 Confirm doctor's written orders.
09.05 Use telephone etiquette.
09.06 Use appropriate radiographic terminology.
09.07 Use appropriate body language.
09.08 Use effective communication with patients.
09.09 Obtain pertinent and relevant patient information to assist in the diagnosis.

10.0 DEMONSTRATE KNOWLEDGE OF IMMUNE DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
10.02 Identify community resources and services available to the victim of immune-deficiency diseases.
10.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
10.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Center for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

11.01 Conduct a job search.

11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application properly.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.
11.10 Recognize the need for continuing education to maintain licensure and proficiency in the profession.

12.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

12.01 Identify the basic components of the health care delivery system.
12.02 Describe the various types of health care providers and the range of services available.
12.03 Describe the composition and functions of a health care team.
12.04 Identify the general roles and responsibilities of the individual members of the health care team.
12.05 Describe trends affecting the delivery of health care.

13.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

13.01 Develop a basic understanding of the structure and functions of the body system.
13.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
13.03 Identify psychological reactions to illness.
13.04 Explain basic concepts of wellness and stress.
13.05 Develop a wellness and stress control plan that can be used in his/her personal and professional life.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Cardiovascular Technology

CODE NUMBER: Secondary ________ Postsecondary ________

Florida CIP 0317.020100

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____7-9 ____9-12 _____ Postsecondary Adult Vocational

X Postsecondary Vocational ______ Other ________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as cardiovascular technologists. Cardiovascular technology educational programs will address one or more of the three basic sub-specialties: invasive cardiology, noninvasive cardiology, or noninvasive peripheral vascular study.

The course content includes, but is not limited to, instruction in performing examinations leading to diagnosis and treatment of patients with cardiac and peripheral vascular disease. Cardiovascular technologists are not trained to expose patients to ionizing radiation. A clinical component is a necessary element of this program. Reinforcement of basic skills in English, mathematics and science occurs through classroom instruction and applied laboratory practice.

II. LABORATORY ACTIVITIES: Simulation exercises using appropriate equipment are provided. Clinical laboratory experiences are integrated with the didactic portion of this program.

III. SPECIAL NOTE: The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). Graduates should be prepared to take the appropriate national certification, registry and/or state licensure examinations.

Students should be encouraged to become members of Health Occupations Students of America, Inc., and/or their appropriate professional organization.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing the core curriculum of this program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Identify the anatomic structure and function of body systems in relation to cardiovascular disease and studies.
05. Practice safety and quality assurance.
06. Follow legal, ethical and professional principles related to the practice of cardiovascular technology.
07. Use basic medical electronics and medical instrumentation.
08. Describe the role of the cardiovascular technologist in catastrophic event management.

09. Discuss the pharmacological aspects of cardiovascular drugs.
10. Perform patient care, record patient history and practice effective patient communication.
11. Apply accepted principles of infection control.
12. Demonstrate employability skills.

ONE OF THE FOLLOWING SUB-SPECIALTIES MUST BE ADDED TO THE INTENDED OUTCOMES. ADDITIONAL SUB-SPECIALTIES MAY BE INCLUDED AS DESIRED.

For those programs which include the invasive cardiology sub-specialty, the student will be able to:

13. Assist in all aspects of invasive cardiovascular techniques with emphasis on cardiac catheterization.
14. Perform and interpret blood gas analyses.

For those programs which include the noninvasive cardiovascular sub-specialty, the student will be able to:

15. Perform noninvasive cardiovascular techniques with an emphasis on echocardiography.

For those programs which include the noninvasive peripheral vascular sub-specialty, the student will be able to:

16. Perform noninvasive peripheral vascular studies.

In addition, one other component may be added.

For those programs which include a pulmonary component, the student will be able to:

17. Perform pulmonary function testing.
18. Perform and interpret blood gas analyses.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ____________

PROGRAM TITLE: Cardiovascular Technology POSTSECONDARY NUMBER: 0317.02100

01.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

01.01 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
01.02 Distinguish factual reports and personal opinion.
01.03 Report observations in written and oral form.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO CARDIOVASCULAR DISEASE AND STUDIES -- The student will be able to:

04.01 Describe human anatomy and physiology with emphasis on the cardiovascular and pulmonary systems.
04.02 Discuss principles and methods of disease transmission and prevention.
04.03 Identify normal and abnormal data obtained from medical tests.
04.04 Describe basic pathological conditions of the cardiovascular and pulmonary systems.

05.0 PRACTICE SAFETY AND QUALITY ASSURANCE -- The student will be able to:

05.01 Follow institutional safety policy and procedures.
05.02 Observe acceptable safety practices in cardiovascular instrumentation.
05.03 Demonstrate knowledge of radiation safety procedures.

06.0 ADHERE TO LEGAL, ETHICAL AND PROFESSIONAL PRINCIPLES RELATED TO THE PRACTICE OF CARDIOVASCULAR TECHNOLOGY -- The student will be able to:

06.01 Discuss the major dilemmas facing the American health care system.
06.02 Describe the cardiovascular technology profession.
06.03 Describe the sub-specialties of non-invasive cardiology, invasive cardiology, vascular technology and cardiopulmonary technology.
06.04 Identify the cardiovascular professional organizations and discuss their roles.
06.05 Discuss certification, licensure and registration for the cardiovascular technologist.
06.06 Develop the attitudes and work habits needed for employment.
06.07 List the rights to which all health care clients are entitled.
06.08 Identify the duties and responsibilities of the cardiovascular technologist.

07.0 USE BASIC MEDICAL ELECTRONICS AND MEDICAL INSTRUMENTATION
-- The student will be able to:

07.01 Identify the duties related to electronic monitoring and diagnostic testing of patient.
07.02 Demonstrate computer literacy skills as applied to cardiovascular practice.
07.03 Operate equipment used in diagnostic testing and physiological monitoring of patients.
07.04 Set up, calibrate and operate selected equipment in the cardiovascular laboratory.

08.0 DESCRIBE THE ROLE OF THE CARDIOVASCULAR TECHNOLOGIST IN CATASTROPHIC EVENT MANAGEMENT -- The student will be able to:

08.01 Follow institutional catastrophic event protocol.
08.02 Respond to simulated emergency care situations encountered in a cardiovascular department.
08.03 Achieve cardiopulmonary resuscitation certification through the American Heart Association or the American Red Cross.
08.04 Identify the components of the defibrillator.
08.05 Cite the indications for cardiac defibrillation and cardioversion.

09.0 DISCUSS THE PHARMACOLOGICAL ASPECTS OF CARDIOVASCULAR DRUGS
-- The student will be able to:

09.01 State the mechanism of action of selected cardiovascular drugs.
09.02 Identify and describe uses of pharmacological agents on an emergency "crash" cart.
09.03 Calculate drug dosages and mixtures.
09.04 Use needles and syringes in preparing medications for administration in simulated practice.
09.05 Describe intravenous fluid therapy maintenance.

10.0 PERFORM PATIENT CARE, RECORD PATIENT HISTORY AND PRACTICE EFFECTIVE COMMUNICATION -- The student will be able to:

10.01 Perform patient identification procedures.
10.02 Examine patient chart and locate pertinent information.
10.03 Perform a patient history pertinent to the cardiovascular exam.
10.04 Practice patient care with emphasis on patient privacy, body mechanics, patient positions and patient transportation.
10.05 Measure vital signs and differentiate between normal and abnormal values.
10.06 Cite the indications for and name the methods of oxygen administration.
10.07 Perform the attachment of a regulator to and regulate the flow of oxygen from a tank or central system.
10.08 Perform suctioning technique in a simulated laboratory setting.
10.09 Recognize human behaviors indicative of anxiety.
10.10 Identify and develop effective communication and interpersonal relations skills.
10.11 Discuss approaches used in dealing with a variety of hospitalized persons.
10.12 Describe socio-cultural traits which may effect a person's hospital care.
10.13 Practice aseptic technique in the patient care setting.

11.0 APPLY ACCEPTED PRINCIPLES OF INFECTION CONTROL
-- The student will be able to:

11.01 Distinguish fact from fallacy regarding the transmission and treatment of immune-deficiency diseases.
11.02 Identify community resources and services available to the victims of immune-deficiency diseases.
11.03 Identify "at-risk" behaviors which promote the spread of AIDS and

the public education needed to combat the spread of immune-deficiency diseases.

11.04 Apply infection control techniques following the Center for Disease Control (CDC) guidelines.
11.05 Discuss the legal aspects of AIDS.

12.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

12.01 Conduct a job search.
12.02 Secure information about a job.
12.03 Identify documents required when applying for a job.
12.04 Complete a job application correctly.
12.05 Demonstrate competence in job interview techniques.
12.06 Identify or demonstrate acceptable responses to criticism from employer, supervisor or other persons.
12.07 Identify acceptable work habits.
12.08 Discuss acceptable means of changing jobs.
12.09 Demonstrate acceptable employee health habits.

One of the following sub-specialties must be added to the intended outcomes. Additional sub-specialties may be included, as desired.

* **For those programs which include the invasive cardiology sub-specialty, the following student performance standards are necessary.**

13.0 ASSIST IN ALL ASPECTS OF INVASIVE CARDIOVASCULAR TECHNIQUES WITH EMPHASISON CARDIAC CATHETERIZATION -- The student will be able to:

13.01 Practice sterile technique as it applies to the cardiac catheterization set up and protocol.
13.02 Describe routine left heart and right heart catheterization set up and protocols.
13.03 Describe interventional procedures in the cardiac cath lab including, but not limited to, angioplasty, electrophysiology studies, valvuloplasty, biopsy and pericardiocentesis.
13.04 Describe catheter insertion techniques and assist physician with manipulation of catheterization instruments during the procedure.
13.05 Recognize cardiac anatomy through angiography and assess cardiac status from the data.
13.06 Recognize cardiac hemodynamic parameters and record and measure left and right heart pressures.
13.07 Determine cardiac output by Fick equation, thermodilution technique or green dye studies.
13.08 Perform calculations which include, but are not limited to, ejection fraction by planimetry, valve area using Gorlin formula and resistances.
13.09 Recognize presence of shunts by oximetry and/or dye curves and perform shunt calculations.
13.10 Discuss permanent and temporary pacemaker protocols and assist physician with implantation.
13.11 Correlate and calculate necessary data from right and left heart catheterization and assess the cardiac status from this information.
13.12 Demonstrate acceptable post-cath care of the catheterization site.
13.13 Identify arrhythmias which occur during cardiac catheterization.
13.14 Perform venipuncture to initiate intravenous fluid therapy.
13.15 Maintain and troubleshoot existing intravenous/intra-arterial lines.

14.0 PERFORM AND INTERPRET BLOOD GAS ANALYSES -- The student will be able to:

14.01 Discuss blood gas and acid-base physiology.
14.02 Identify normal and abnormal blood gas values.
14.03 Interpret blood gas and acid-base data.

14.04 Describe quality control techniques in blood gas analyses.
14.05 Outline the steps in collecting arterial blood samples.

* **For those programs which include the noninvasive cardiology sub-specialty, these student performance standards are necessary.**

15.0 PERFORM NONINVASIVE CARDIOVASCULAR TECHNIQUES WITH AN EMPHASIS ON ECHOCARDIOGRAPHY -- The student will be able to:

15.01 Auscultate normal and abnormal heart sounds and relate abnormal findings to specific cardiac pathology.
15.02 Perform external pulse traces and relate abnormal findings to cardiac pathology.
15.03 Perform, measure and recognize normal and abnormal electrocardiograms.
15.04 Assist in performance of stress electrocardiography and explain indications, contraindications, positive and negative test results.
15.05 Assist in performance of ambulatory electrocardiography and explain indications and test results.
15.06 Describe the physics of ultrasound as it applies to echocardiography and cardiac Doppler.
15.07 Demonstrate function and use of noninvasive cardiology equipment.
15.08 Perform, measure and analyze M-Mode and Two-Dimensional echocardiograms.
15.09 Perform, measure and analyze Conventional and Color Flow Doppler exams.
15.10 Discuss the theory and practice of interventional Doppler echocardiography.

* **For those programs which include the noninvasive peripheral vascular sub-specialty, the following student performance standards are necessary.**

16.0 PERFORM NONINVASIVE PERIPHERAL VASCULAR STUDIES -- The student will be able to:

16.01 Discuss physics as it applies to noninvasive peripheral vascular studies including the Doppler.
16.02 Differentiate between normal and abnormal peripheral vascular data.
16.03 Perform noninvasive peripheral vascular evaluations including venous, arterial and cerebral vascular studies.

In addition, one other component may be added.

* **For those programs which include a pulmonary component, these are the student performance standards.**

17.0 PERFORM PULMONARY FUNCTION TESTING -- The student will be able to:

17.01 Describe the function and use of pulmonary function equipment.
17.02 Cite the national standards for pulmonary functions testing.
17.03 Describe exercise and metabolic testing.
17.04 Perform calibration and quality control for pulmonary function equipment.
17.05 Describe distribution of ventilation, compliance and resistance measurements.
17.06 Perform pulmonary function tests including calculation and interpretation.
17.07 Perform spirometric measurements and procedures.
17.08 Perform lung volume measurements.
17.09 Perform lung diffusion measurements.

18.0 PERFORM AND INTERPRET BLOOD GAS ANALYSES -- The student will be able to:

18.01 Discuss blood gas and acid-base physiology.
18.02 Identify normal and abnormal blood gas values.
18.03 Interpret blood gas and acid-base data.
18.04 Describe quality control techniques in blood gas analyses.
18.05 Outline the steps in collecting arterial blood samples.

* **These are the student performance standards necessary for each sub-specialty or optional component.**

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Central Service Technology

CODE NUMBER: Secondary 8415300 Postsecondary H170502

Florida CIP 0317.050200

SECONDARY
SCHOOL CREDITS 1 COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 10-12, 30, 31

CERTIFICATION COVERAGE: NURSING ED @5 TEC MED @7 G PRAC NURSE @7 G

I. MAJOR CONCEPTS/CONTENT: This program is designed to prepare students for employment as supervisors, central supply (079.164-010), central supply workers (381.687-010), sterilizors (599.585-010),central service technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, central services departmental organization and function; basic anatomy, physiology, microbiology and chemistry related to central service activities; quality assurance; infection control and isolation techniques, principles of safety; principles, methods and controls of sterilization processes; cleaning, processing, packaging, distributing, storing, and inventory control of sterile goods, instruments, trays, and equipment; medical terminology; surgical instrumentation; basic computer skills, interpersonal and job seeking skills, fundamentals of communication, and procurement of supplies and equipment.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Skills and competencies are achieved through laboratory practice using supplies, instruments and equipment as found in central service departments. Instrumentation, sterilization processing, decontamination, inventory control and distribution is also presented. A working knowledge of computers should be achieved. Students should be rotated through the decontamination, preparation, sterilization, storage, and distribution areas. Clinical learning experiences are an integral part of this program.

III. SPECIAL NOTE: Health Occupations Students of America is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be used for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 300 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student should be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Identify fundamentals of communication skills.
05. Recognize basic principles of microbiology.
06. Receive, decontaminate, clean, prepare, disinfect and sterilize reusable items.
07. Demonstrate the use of sterilization process monitors, including temperature and frequency of appropriate chemical indicators and bacterial spore tests for all sterilizers.
08. Describe how central service is involved in controlling infections in hospitals.
09. Explain the purpose of Occupational Safety and Health Act (OSHA).
10. Demonstrate employability skills.
11. Describe supply distribution systems and the principles of inventory control.
12. Demonstrate the ability to recall and dispose of or reprocess outdated sterile supplies.
13. Interpret and apply medical terminology and anatomical terms as they relate to equipment and supplies issued by central service personnel.
14. Identify fundamentals of procurement skills.

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations — SECONDARY NUMBER: 8415300
PROGRAM TITLE: Central Service Technology — POSTSECONDARY NUMBER: H170502

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

01.01 Identify and use various forms of communications.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Maintain current documentation.
01.06 Demonstrate proper telephone usage.
01.07 Demonstrate basic computer skills.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Read, interpret and report on graphs, charts and tables.
02.02 Make and use measurements in both traditional and metric units.
02.03 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Demonstrate ability to evaluate and draw conclusions.

04.0 IDENTIFY FUNDAMENTALS OF COMMUNICATION SKILLS -- The student will be able to:

04.01 Describe appropriate manner in which to answer phone.
04.02 Describe proper intra-inter communication of employees.
04.03 How to be a good listener as well as transmitter.
04.04 Describe principles of human relationship.

05.0 RECOGNIZE BASIC PRINCIPLES OF MICROBIOLOGY -- The student will be able to:

05.01 Identify the four main categories of microorganisms.
05.02 Describe three (3) life functions of bacteria.
05.03 Describe conditions affecting the growth of bacteria.
05.04 Describe special methods used to destroy harmful microorganisms.
05.05 List the helpful microorganisms.
05.06 Describe 5 ways the body controls the growth of pathogenic microorganisms.
05.07 Identify pathogenic microorganisms found in central service departments.
05.08 Identify terminology related to microbiology.

06.0 RECEIVE, DECONTAMINATE, CLEAN, PREPARE, DISINFECT AND STERILIZE REUSABLE ITEMS -- The student will be able to:

06.01 Recognize the importance of thorough cleaning to the overall objectives of making items safe for patient use.
06.02 Explain how instruments, syringes, needles, rubber goods and equipment should be cleaned.
06.03 Describe how the ultrasonic machines and washer/sterilizers work.
06.04 Explain the importance of following manufacturers instructions in cleaning.
06.05 Explain at least three reasons why detergents are preferred over soaps.

06.06 Explain the primary objectives in selecting the correct packaging materials.
06.07 Demonstrate the wrapping of procedures trays, instruments and other supplies.
06.08 Describe how sterile supplies should be handled.
06.09 Explain the principles involved in loading different kinds of wrapped packs or packages into a sterilizer to be assured of steam or gas penetration.
06.10 Recognize equipment malfunction and list corrective actions.
06.11 Identify basic surgical instruments and accessories.

07.0 DEMONSTRATE THE USE OF STERILIZATION PROCESS MONITORS, INCLUDING TEMPERATURE AND FREQUENCY OF APPROPRIATE CHEMICAL INDICATORS AND BACTERIAL SPORE TESTS FOR ALL STERILIZERS -- The student will be able to:

07.01 List the guidelines for the safe use of ethelyne oxide sterilization.
07.02 Name the two spores used for spore testing and for which types of sterilizers they are used.
07.03 Explain the purpose and proper procedure for performing the residual of air test in a vacuum sterilizer and other chemical and biological indicators.
07.04 Demonstrate the basic reading of temperature and pressure recordings.
07.05 Explain the reasons for biological monitoring.

08.0 DESCRIBE HOW CENTRAL SERVICE IS INVOLVED IN CONTROLLING INFECTIONS IN HOSPITALS -- The student will be able to:

08.01 Describe the proper dress code in the clean and soiled sections of CS and outside of CS department in hospital.
08.02 Explain infection control practices in C.S. i.e. traffic control patterns, personal health, work flow and housekeeping.
08.03 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
08.04 Explain the importance of handwashing in controlling infection, how bacteria are transmitted from one person to another.
08.05 Describe nosocomial infections.
08.06 Describe the types of isolation.
08.07 Describe the organization and functions of C.S.
08.08 Describe the organizational patterns of health care facilities.

09.0 EXPLAIN THE PURPOSE OF OCCUPATIONAL SAFETY AND HEALTH ACT -- The student will be able to:

09.01 Describe how employees are protected under OSHA.
09.02 Describe at least six different things that can cause accidents in C.S.
09.03 Describe some of the methods of preventing the situations that can lead to accidents.
09.04 Describe the role preventive maintenance plays in patient and personnel safety in the hospital.
09.05 Describe some of the fire safety concerns in a modern hospital.
09.06 Explain body mechanics and demonstrate proper lifting techniques.
09.07 Explain the purpose of Florida's "Right to Know" law and its provisions.
09.08 Recognize the importance of filling out incident reports and reports to the Emergency Room.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

10.01 Conduct a job search.
10.02 Secure information about a job.
10.03 Identify documents that may be required when applying for a job.
10.04 Complete a job application form correctly.
10.05 Demonstrate competence in job interview techniques.

10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
10.07 Identify acceptable work habits.
10.08 Demonstrate knowledge of how to make job changes appropriately.
10.09 Demonstrate acceptable employee health habits.

11.0 DESCRIBE SUPPLY DISTRIBUTION SYSTEMS AND THE PRINCIPLES OF INVENTORY CONTROL -- The student will be able to:

11.01 List five (5) reasons for inventory control.
11.02 Compare the advantages and disadvantages of four distribution methods.
11.03 Define the benefits of computer inventory.
11.04 Process a requisition marked "state"-locate article, price, etc.

12.0 DEMONSTRATE THE ABILITY TO RECALL AND DISPOSE OF OR REPROCESS STERILE SUPPLIES -- The student will be able to:

12.01 Explain the factors that effect how long a package can be considered safe for use.
12.02 State the methods of determining expiration dates.
12.03 List the steps in reprocessing outdated hospital packaged items.
12.04 List four (4) conditions that would make a product unsafe for use.
12.05 Describe the shelf life of stored sterile goods.
12.06 Describe the methods of reprocessing.

13.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY AND ANATOMICAL TERMS AS THEY RELATE TO EQUIPMENT AND SUPPLIES ISSUED BY CENTRAL SERVICE PERSONNEL -- The student will be able to:

13.01 Identify components for medical terms.
13.02 Identify two (2) functions of each body system.
13.03 Use acceptable medical terminology.
13.04 Relate anatomical concepts to orthopedic devices and other supplies and equipment issued by the C.S. Department.

14.0 IDENTIFY FUNDAMENTALS OF PROCUREMENT SKILLS -- The student will be able to:

14.01 Describe procurement system.
14.02 Communicate with other hospitals for procurement of supplies and equipment.
14.03 Describe several different methods of procurement of supplies.
14.04 Describe basics of receiving items.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Coder Specialist

CODE NUMBER: Secondary ______ Postsecondary H170526

Florida CIP 0317.050602

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: CERT COD SP G MED RECTEC @7 G
MED ASST @7 G MED TRANS @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as coder, medical record coder, coding technician, coding clerk, coder specialist, (Industry Title) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, medical terminology, anatomy and physiology, coding systems, fundamentals of disease process including pharmacology, health care delivery systems, basics of medical records services, ethical and legal responsibilities, safety/security procedures, basic data processing, and employability skills.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory facilities and equipment should be provided. Laboratory activities should be correlated with classroom activities and reinforced in the clinical area. Supervised clinical practice is an integral part of the program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

Students should be encouraged to become members of the local and national professional organization and participate in the activities. Completers of this program should be prepared to take the coding specialist certification examination given by the American Medical Record Association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the occupation. the student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 10.0 and Reading 10.0. This grade level number corresponds to grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 900 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Describe the anatomy and physiology of the human body.
02. Demonstrate proficiency in the application of medical terminology.
03. Demonstrate an understanding of the fundamentals of disease process in relationship to the human body, including pharmacology.
04. Demonstrate proficiency in use of coding systems, both manual and automated.
05. Discuss the health care delivery system.
06. Explain the basics of medical record services.
07. Demonstrate ethical and legal principles with regard to the use of medical records.
08. Practice safety/security procedures.
09. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Coder Specialist POSTSECONDARY NUMBER: H170526

01.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY -- The student will be able to:

01.01 Describe the basic structure and function of body systems.
01.02 Describe the structure and function of the respiratory system.
01.03 Describe the structure and function of the cardio-vascular system.
01.04 Describe the structure and function of the muscular-skeletal system.
01.05 Describe the structure and function of nervous, skin, and sensory systems.
01.06 Describe the structure and function of the reproductive system.
01.07 Describe the structure and function of the urinary system.
01.08 Describe the structure and function of the digestive system.
01.09 Describe the structure and function of the endocrine system.

02.0 DEMONSTRATE PROFICIENCY IN THE APPLICATION OF MEDICAL TERMINOLOGY -- The student will be able to:

02.01 Recognize and identify word parts in daily use of medical terminology.
02.02 Build, spell and pronounce correctly, appropriate terms from word parts learned and be able to give the meaning of the word.
02.03 Identify word parts and be able to build, spell and understand new words with those parts.
02.04 Spell and use medical abbreviations.
02.05 Recognize and identify terminology of hospital and other clinical forms.
02.06 Demonstrate use of basic terminology common to medical/surgical practices.

03.0 DEMONSTRATE AN UNDERSTANDING OF THE FUNDAMENTALS OF DISEASE PROCESS IN RELATIONSHIP TO THE HUMAN BODY, INCLUDING PHARMACOLOGY -- The student will be able to:

03.01 Demonstrate an understanding of the predisposing factors and direct causes of disease as they relate to the human body.
03.02 Demonstrate an understanding of the general morphology of organisms and their role in the disease process.
03.03 Demonstrate an understanding of the pathogenesis of diseases of the digestive system.
03.04 Identify the structures and function of the accessory organs of digestion and the diseases which may occur.
03.05 Identify the major diseases of the urinary system and the male reproductive system.
03.06 Demonstrate an understanding of the pathogenesis of diseases of the reproductive system.
03.07 Identify the disorders/diseases of the endocrine system.
03.08 Demonstrate an understanding of the diseases of the nervous system.
03.09 Demonstrate an understanding of the pathogenesis of diseases of the muscular-skeletal system.
03.10 Identify the diseases related to the cardio-vascular system.
03.11 Demonstrate an understanding of the pathogenesis of diseases of the respiratory system.

04.0 DEMONSTRATE PROFICIENCY IN USE OF CODING SYSTEMS, BOTH MANUAL AND AUTOMATED -- The student will be able to:

04.01 Outline the development of nomenclatures and classification

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations — SECONDARY NUMBER: _______

PROGRAM TITLE: Coder Specialist — POSTSECONDARY NUMBER: H170526

01.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY -- The student will be able to:

01.01 Describe the basic structure and function of body systems.
01.02 Describe the structure and function of the respiratory system.
01.03 Describe the structure and function of the cardio-vascular system.
01.04 Describe the structure and function of the muscular-skeletal system.
01.05 Describe the structure and function of nervous, skin, and sensory systems.
01.06 Describe the structure and function of the reproductive system.
01.07 Describe the structure and function of the urinary system.
01.08 Describe the structure and function of the digestive system.
01.09 Describe the structure and function of the endocrine system.

02.0 DEMONSTRATE PROFICIENCY IN THE APPLICATION OF MEDICAL TERMINOLOGY -- The student will be able to:

02.01 Recognize and identify word parts in daily use of medical terminology.
02.02 Build, spell and pronounce correctly, appropriate terms from word parts learned and be able to give the meaning of the word.
02.03 Identify word parts and be able to build, spell and understand new words with those parts.
02.04 Spell and use medical abbreviations.
02.05 Recognize and identify terminology of hospital and other clinical forms.
02.06 Demonstrate use of basic terminology common to medical/surgical practices.

03.0 DEMONSTRATE AN UNDERSTANDING OF THE FUNDAMENTALS OF DISEASE PROCESS IN RELATIONSHIP TO THE HUMAN BODY, INCLUDING PHARMACOLOGY -- The student will be able to:

03.01 Demonstrate an understanding of the predisposing factors and direct causes of disease as they relate to the human body.
03.02 Demonstrate an understanding of the general morphology of organisms and their role in the disease process.
03.03 Demonstrate an understanding of the pathogenesis of diseases of the digestive system.
03.04 Identify the structures and function of the accessory organs of digestion and the diseases which may occur.
03.05 Identify the major diseases of the urinary system and the male reproductive system.
03.06 Demonstrate an understanding of the pathogenesis of diseases of the reproductive system.
03.07 Identify the disorders/diseases of the endocrine system.
03.08 Demonstrate an understanding of the diseases of the nervous system.
03.09 Demonstrate an understanding of the pathogenesis of diseases of the muscular-skeletal system.
03.10 Identify the diseases related to the cardio-vascular system.
03.11 Demonstrate an understanding of the pathogenesis of diseases of the respiratory system.

04.0 DEMONSTRATE PROFICIENCY IN USE OF CODING SYSTEMS, BOTH MANUAL AND AUTOMATED -- The student will be able to:

04.01 Outline the development of nomenclatures and classification

systems.
04.02 Identify conventions and characteristics used in coding.
04.03 Analyze and code diagnoses, procedures, and symptoms.
04.04 Demonstrate ability to code, classify, and index.
04.05 Explain the relationship of Diagnosis Related Groups and the Prospective Payment System to coding.
04.06 Identify the various external regulating agencies and their impact on the coding systems.
04.07 Use procedures for ensuring data quality.

05.0 DISCUSS THE HEALTH CARE DELIVERY SYSTEM -- The student will be able to:

05.01 Give the definition of health, as stated by the World Health Organization.
05.02 Explain the development of hospitals from ancient times to the present.
05.03 Explain the effect on family and community life with the change from rural to urban society.
05.04 List factors which influence health of the individual, nation, and world.
05.05 List the responsibilities of national, state and local health agencies to citizens.
05.06 Describe different types of health care facilities, i.e., clinics, community health care facilities, etc.
05.07 Explain purpose and classification of hospitals.

06.0 EXPLAIN THE BASICS OF MEDICAL RECORD SERVICES -- The student will be able to:

06.01 Describe origin, history and definition of medical records.
06.02 Describe the functions of the medical record department, i.e., data collecting, filing retrieving, coding, indexing, etc.
06.03 Explain the classification and functions of medical record personnel and chain of command.
06.04 State reasons medical records are important in the health care delivery system.
06.05 Explain different filing systems used in health care institutions.
06.06 Describe the development of the medical record.
06.07 Explain the importance of the medical record in relation to the state and federal agencies, accrediting and licensing agencies.
06.08 Recognize the different filing and coding classification systems.

07.0 DEMONSTRATE ETHICAL AND LEGAL PRINCIPLES WITH REGARD TO THE USE OF MEDICAL RECORDS -- The student will be able to:

07.01 Explain the importance of maintaining ethical and legal standards in compiling and using medical records.
07.02 Discuss the Code of Ethics of the American Medical Association.

08.0 PRACTICE SAFETY/SECURITY PROCEDURES -- The student will be able to:
08.01 Participate in emergency or disaster plans.
08.02 Report safety hazards.
08.03 Identify institution's security policies/procedures.
08.04 Practice good body mechanics.

09.0 USE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Dental Aide

CODE NUMBER: Secondary 8403100 Postsecondary ______

Florida CIP 0317.010102

SECONDARY
SCHOOL CREDITS 3 COLLEGE CREDITS ____ POSTSECONDARY ADULT
VOCATIONAL CREDITS ____

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 ____ Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 10-12, 30-31

CERTIFICATION COVERAGE: DENTAL HYG @5 DENTAL ASST @7 G

I. MAJOR CONCEPTS/CONTENT: This program is designed to provide classroom theory and practical application in assisting dentists with actual dental procedures in the care of a patient. It is designed to prepare a student for employment as a dental aide (66002436) in a dental office or clinic, or to pursue advanced dental careers.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level. Dental Aide I is the prerequisite for Dental Aide II and Dental Aide III.

8403110 Dental Aide 1
8403120 Dental Aide 2
8403130 Dental Aide 3

The content includes: Dental office and patient management, manipulation of dental materials, basic dental laboratory procedures, dental anatomy, dental terminology, dental instruments and equipment, basic assisting, dental office emergencies/CPR, asepsis, maintenance of dental operatory, equipment and instruments, dental specialty procedures, employability skills, leadership and human relations skills, ethics and jurisprudence, health and safety.

II. LABORATORY ACTIVITIES: Students will perform skills representative of major areas of dental health care in the laboratory setting. Clinical learning experiences are required and must correlate with didactic and laboratory experiences.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

A student who completes this program (Dental Aide I, II, III) may substitute a required science credit in accordance with the Pupil Progression Plan. Students completing this program with a 3.5 GPA will be eligible for the Gold Seal Endorsement.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the teacher, and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a place of employment which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

The approximate length of this program for the average achieving student is 300 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

1.0 Demonstrate application of basic math skills.
2.0 Demonstrate basic competencies in science.
3.0 Use verbal and written communications, including terminology.
4.0 Demonstrate course orientation skills.
5.0 Identify structures, functions and pathologies of dental anatomy.
6.0 Differentiate between various microorganisms and their relationship to Dentistry.
7.0 Identify disease prevention and perform infection control procedures.
8.0 Demonstrate knowledge of immune-deficiency diseases, including HIV and AIDS.
9.0 Describe the legal and ethical responsibilities of the Dental Health Care worker.
10.0 Identify, describe, and maintain dental instruments and equipment.
11.0 Assist in administering dental office emergency care and cardiopulmonary resuscitation.
12.0 Identify properties, uses, and manipulation of Dental materials which include gypsum, restorative material, dental cements, impression material, acrylics and waxes.
13.0 Perform basic dental laboratory procedures.
14.0 Perform basic assisting.
15.0 Identify specialty procedures.
16.0 Perform general office procedures in a dental facility.
17.0 Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July 1994

PROGRAM AREA: Health Occupations
SECONDARY NUMBER: 8403100

PROGRAM TITLE: Dental Aide
POSTSECONDARY NUMBER:

01.0 DEMONSTRATE APPLICATION OF BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, and analyze and report on graphs, charts, and tables.
01.02 Student will measure time, temperature, distance, capacity and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Make estimates and approximations and judge the reasonableness of the result.

02.0 DEMONSTRATE BASIC COMPETENCIES IN SCIENCE -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Demonstrate ability to evaluate and draw conclusions.

03.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

03.01 Identify and define common dental terms.
03.02 Prepare records using proper terminology.
03.03 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a dental dictionary.
03.04 Distinguish factual reports and personal opinion.
03.05 Demonstrate ability to report observations in written or oral form.

04.0 DEMONSTRATE COURSE ORIENTATION SKILLS -- The student will be able to:

04.01 Identify course objectives.
04.02 Identify student benefits and responsibilities.
04.03 Identify teaching methods, techniques, and student evaluation.
04.04 Identify postsecondary programs offered in dentistry.
04.05 Complete application for admission.

05.0 IDENTIFY STRUCTURES AND EXPLAIN FUNCTIONS AND PATHOLOGIES OF DENTAL ANATOMY -- The student will be able to:

05.01 Identify structures and functions of head and neck anatomy; including bones, muscles, sinuses, salivary glands, nerves, and vessels.
05.02 Identify embryonic development of head, oral cavity, and teeth.
05.03 Identify teeth and their landmarks.
05.04 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
05.05 Recognize and describe oral pathological conditions.

06.0 DIFFERENTIATE BETWEEN VARIOUS MICROORGANISM AND THEIR RELATIONSHIP TO DENTISTRY -- The student will be able to:

06.01 Define the science of microbiology.
06.02 Describe the importance of a knowledge of microbiology to the proper practice of dentistry.
06.03 Demonstrate general knowledge of the history and development of the field of microbiology.
06.04 Identify the differences and uses of the compound light microscope, phase contrast microscope and electron microscope.

06.05 Describe the various parts of the compound light microscope.
06.06 Define terms related to microbiology, such as resolution, fixation and staining.
06.07 Name five groups of microorganisms that make up the protist classification.
06.08 Describe the relative size of bacteria, viruses, yeasts and molds.
06.09 List some examples of both beneficial and harmful functions and activities of the protist, yeasts, molds, bacteria, etc.
06.10 Explain the structure and types of yeasts, bacteria, viruses, etc.
06.11 Explain the manner of reproduction of organisms, such as yeasts, moles, bacteria, viruses, etc.
06.12 List several harmful and beneficial activities of yeasts, molds, bacteria, viruses, etc.
06.13 Define protozoa and describe their structure and function.
06.14 Differentiate between pathogenic and nonpathogenic bacteria.
06.15 Describe the structure and functions of parasite and saprophytes.
06.16 Describe the manner in which a parasite obtains nourishment for growth and development.
06.17 Discuss bacterial spore formation and the implications for sterilization and infection control in the dental environment.
06.18 List the conditions required for bacterial growth.
06.19 Discuss conditions that can limit or inhibit bacterial growth.
06.20 Explain the differences between aerobic and anaerobic bacteria.
06.21 Describe how bacteria grow and multiply.
06.22 Discuss favorable conditions for reproduction of bacteria.
06.23 Discuss methods of bacterial disease transmission.
06.24 List four portals of entry of bacteria into the body.
06.25 Discuss the factors which will determine whether or not a bacterial invasion will cause a disease.
06.26 Discuss ways in which bacteria and other microorganisms can exist in the body.
06.27 Discuss two ways that bacteria can cause disease.
06.28 List and explain the body defense mechanisms.
06.29 Define terms related to immunity and antibodies.
06.30 Differentiate between localized and generalized infections.
06.31 Explain immunity.
06.32 Differentiate between natural and acquired immunity, active and passive immunity.
06.33 Define terms antigen, autoimmunity, hypersensitivity, allergy, anaphylaxis toxic and toxoid.
06.34 Discuss vaccines and their purpose.
06.35 List four ways that vaccines can be produced.
06.36 Discuss the use of immune serums and the type of immunity they produce.
06.37 List four physical means of destroying bacteria.
06.38 Discuss and compare the relative effectiveness of different physical means of destroying bacteria.
06.39 Discuss widely used and effective means of sterilizing dental instruments.
06.40 Describe how bacteria can be destroyed by chemical means.
06.41 Discuss the difference between an antiseptic and disinfectant, and their appropriate uses.
06.42 List the three mechanisms of action of antibiotics.
06.43 Discuss the difference between trade names and generic names of drugs.
06.44 Discuss potentially harmful aspects of antibiotics.
06.45 Describe and discuss the purpose of antibiotic sensitivity tests.
06.46 Describe the measures used in all health care facilities for infection control.

07.0 IDENTIFY DISEASE PREVENTION AND PERFORM INFECTION CONTROL PROCEDURES

-- The student will be able to:

07.01 Describe modes of disease transmission.
07.02 Differentiate between aseptic and non-aseptic environments.

07.03 Perform aseptic handwashing technique.
07.04 Describe methods of disinfection and sterilization.
07.05 Perform infection control techniques.

08.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

08.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
08.02 Identify community resources and services available to the victim of immune-deficiency diseases.
08.03 Identify "at-risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
08.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
08.05 Demonstrate knowledge of the legal aspects of AIDS.

09.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER -- The student will be able to:

09.01 Define commonly used legal vocabulary relating to dentistry.
09.02 Describe legal and ethical consideration/obligations in the dental team-patient relationship.
09.03 Explain risk management.

10.0 IDENTIFY, DESCRIBE, AND MAINTAIN DENTAL INSTRUMENTS AND EQUIPMENT -- The student will be able to:

10.01 Identify various types, functions, and operations of dental operatory and laboratory equipment.
10.02 Identify types and functions of various dental instruments.
10.03 Maintain dental operatory equipment, laboratory equipment, and instruments.

11.0 ASSIST IN ADMINISTERING DENTAL OFFICE EMERGENCY CARE AND CARDIOPULMONARY RESUSCITATION -- The student will be able to:

11.01 Describe dental office emergencies and their prevention and treatment.
11.02 Assist and maintain medical emergency care to include cardiopulmonary resuscitation.

12.0 IDENTIFY PROPERTIES, USES AND MANIPULATION OF DENTAL MATERIALS WHICH INCLUDE GYPSUM, RESTORATIVE MATERIAL, ACRYLICS, DENTAL CEMENTS, IMPRESSION MATERIALS AND WAXES -- The student will be able to:

12.01 Demonstrate an understanding of the composition of dental materials, their physical properties and chemical properties and the manner in which the properties relate to manipulation.
12.02 Demonstrate the manipulative skills necessary to properly prepare dental materials for use both intraorally and extraorally.
12.03 Identify the primary objectives of the Council on Dental Materials and Devices of the American Dental Association.
12.04 Identify the two international organizations responsible for establishing standards for dental materials.
12.05 Describe the physical conditions in the oral cavity which influence the selection of dental materials.
12.06 Describe the biological characteristics of dental materials which may limit their use in the oral cavity.
12.07 List the three factors which must be considered when selecting dental materials.
12.08 Define terms related to dental materials and science.

13.0 PERFORM BASIC DENTAL LABORATORY PROCEDURES -- The student will be able to:

13.01 Identify properties and uses and manipulate gypsum.
13.02 Identify properties and uses and manipulate impression materials.
13.03 Identify properties and uses and manipulate waxes.
13.04 Perform dental laboratory procedures to include the fabrication of casts and custom trays.
13.05 Perform laboratory infection control.

14.0 PERFORM BASIC ASSISTING -- The student will be able to:

14.01 Evacuate and maintain the operating field.
14.02 Assemble instruments and assist in general/and specialty dental procedures.

15.0 IDENTIFY SPECIALTY PROCEDURES -- The student will be able to:

15.01 Identify and describe Oral Maxillofacial surgery.
15.02 Identify and describe Orthodontics.
15.03 Identify and describe Periodontics.
15.04 Identify and describe Prosthodontics.
15.05 Identify and describe Pedodontics.
15.06 Identify and describe Endodontics.
15.07 Identify and describe Public Health Dentistry.

16.0 PERFORM GENERAL OFFICE PROCEDURES -- The student will be able to:

16.01 Maintain appointment control.
16.02 Maintain an active recall system.
16.03 Prepare and maintain accurate patient records.
16.04 Prepare and maintain patient financial records and collect fees.
16.05 Prepare and maintain dental office inventory control.
16.06 Demonstrate public relations responsibilities of the secretary/receptionist.
16.07 Demonstrate skills on office equipment.
16.08 Maintain office environment.
16.09 Receive and dismiss patients and visitors.

17.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

17.01 Conduct a job search.
17.02 Secure information about a job.
17.03 Identify documents that may be required when applying for a job.
17.04 Complete a job application correctly.
17.05 Demonstrate acceptable behavior in job interview techniques.
17.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other persons.
17.07 Identify acceptable work habits.
17.08 Demonstrate knowledge of how to make job changes appropriately.
17.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS		EFFECTIVE DATE:	July 1993
PROGRAM AREA:	Health Occupations	COURSE CREDIT:	1
PROGRAM TITLE:	Dental Aide	PROGRAM NUMBER:	8403100
COURSE TITLE:	Dental Aide 1	COURSE NUMBER:	8403110

COURSE DESCRIPTION: This course is designed to provide classroom theory and practical application in assisting dentists in patient care and dental procedures. It will provide orientation to dental care, basic dental structures and functions, disease prevention and infection control, knowledge of sexually transmitted diseases (including AIDS), legal ethics, dental equipment care, and emergency care/cardiopulmonary resuscitation. Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

01.0 DEMONSTRATE APPLICATION OF BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, and analyze and report on graphs, charts, and tables.
01.02 Student will measure time, temperature, distance, capacity and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Make estimates and approximations and judge the reasonableness of the result.

02.0 DEMONSTRATE BASIC COMPETENCIES IN SCIENCE -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Demonstrate ability to evaluate and draw conclusions.

03.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:
03.01 Identify and define common dental terms.
03.02 Prepare records using proper terminology.
03.03 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a dental dictionary.
03.04 Distinguish factual reports and personal opinion.
03.05 Demonstrate ability to report observations in written or oral form.

04.0 DEMONSTRATE COURSE ORIENTATION SKILLS -- The student will be able to:

04.01 Identify course objectives.
04.02 Identify student benefits and responsibilities.
04.03 Identify teaching methods, techniques, and student evaluation.
04.04 Identify postsecondary programs offered in dentistry.
04.05 Complete application for admission.

05.0 IDENTIFY STRUCTURES AND EXPLAIN FUNCTIONS AND PATHOLOGIES OF DENTAL ANATOMY -- The student will be able to:

05.01 Identify structures and functions of head and neck anatomy; including bones, muscles, sinuses, salivary glands, nerves, and vessels.
05.02 Identify embryonic development of head, oral cavity, and teeth.
05.03 Identify teeth and their landmarks.
05.04 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.

05.05 Recognize and describe oral pathological conditions.

07.0 IDENTIFY DISEASE PREVENTION AND PERFORM INFECTION CONTROL PROCEDURES -- The student will be able to:

07.01 Describe modes of disease transmission.
07.02 Differentiate between aseptic and non-aseptic environments.
07.03 Perform aseptic handwashing technique.
07.04 Describe methods of disinfection and sterilization.
07.05 Perform infection control techniques.

08.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

08.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
08.02 Identify community resources and services available to the victim of immune-deficiency diseases.
08.03 Identify at-risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
08.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

09.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER -- The student will be able to:

09.01 Define commonly used legal vocabulary relating to dentistry.
09.02 Describe legal and ethical consideration/obligations in the dental team-patient relationship.
09.03 Explain risk management.

10.0 IDENTIFY, DESCRIBE, AND MAINTAIN DENTAL INSTRUMENTS AND EQUIPMENT -- The student will be able to:

10.01 Identify various types, functions and operations of dental operatory and laboratory equipment.
10.02 Identify types and functions of various dental instruments.
10.03 Maintain dental operatory equipment, laboratory equipment, and instruments.

11.0 ASSIST IN ADMINISTERING DENTAL OFFICE EMERGENCY CARE AND CARDIOPULMONARY RESUSCITATION -- The student will be able to:

11.01 Describe dental office emergencies and their prevention and treatment.
11.02 Assist and maintain medical emergency care to include cardiopulmonary resuscitation.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July 1993

PROGRAM AREA: Health Occupations
COURSE CREDIT: 1

PROGRAM TITLE: Dental Aide
PROGRAM NUMBER: 8403100

COURSE TITLE: Dental Aide 2
COURSE NUMBER: 8403120

COURSE DESCRIPTION: This course has Dental Aide I as prerequisite and is designed to provide advanced dental aide skills, including: dental laboratory procedures, chair-side assisting, Radiographic procedures, specialty procedures, general office procedures, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

13.0 PERFORM BASIC DENTAL LABORATORY PROCEDURES -- The student will be able to:

13.01 Identify properties and uses and manipulate gypsum.
13.02 Identify properties and uses and manipulate impression materials.
13.03 Identify properties and uses and manipulate waxes.
13.04 Perform dental laboratory procedures to include the fabrication of casts and custom trays.

14.0 PERFORM BASIC ASSISTING -- The student will be able to:

14.01 Evacuate and maintain the operating field.
14.02 Assemble instruments and assist in general/and specialty dental procedures.

15.0 IDENTIFY SPECIALTY PROCEDURES -- The student will be able to:

15.01 Identify and describe Oral Maxillofacial surgery.
15.02 Identify and describe Orthodontics.
15.03 Identify and describe Periodontics.
15.04 Identify and describe Prosthodontics.
15.05 Identify and describe Pedodontics.
15.06 Identify and describe Endodontics.
15.07 Identify and describe Public Health Dentistry.

16.0 PERFORM GENERAL OFFICE PROCEDURES -- The student will be able to:

16.01 Maintain appointment control.
16.02 Maintain an active recall system.
16.03 Prepare and maintain accurate patient records.
16.04 Prepare and maintain patient financial records and collect fees.
16.05 Prepare and maintain dental office inventory control.
16.06 Demonstrate public relations responsibilities of the secretary/receptionist.
16.07 Demonstrate skills on office equipment.
16.08 Maintain office environment.
16.09 Receive and dismiss patients and visitors.

17.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

17.01 Conduct a job search.
17.02 Secure information about a job.
17.03 Identify documents that may be required when applying for a job.
17.04 Complete a job application correctly.
17.05 Demonstrate acceptable behavior in job interview techniques.
17.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other persons.
17.07 Identify acceptable work habits.
17.08 Demonstrate knowledge of how to make job changes appropriately.

17.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July 1993

PROGRAM AREA: Health Occupations COURSE CREDIT: 1

PROGRAM TITLE: Dental Aide PROGRAM NUMBER: 8403100

COURSE TITLE: Dental Aide 3 COURSE NUMBER: 8403130

COURSE DESCRIPTION: This course has Dental Aide I and Dental Aide II as prerequisites and is designed to provide advanced dental aide skills and knowledge which includes the relationship of microorganisms in dentistry and the uses of dental materials such as gypsum, acrylics, dental cement, etc.

Reinforcement of basic skills in English, mathematics, science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

06.0 DIFFERENTIATE BETWEEN VARIOUS MICROORGANISMS AND THEIR RELATIONSHIP TO DENTISTRY -- The student will be able to:

06.01 Define the science of microbiology.
06.02 Describe the importance of a knowledge of microbiology to the proper practice of dentistry.
06.03 Demonstrate general knowledge of the history and development of the field of microbiology.
06.04 Identify the differences and uses of the compound light microscope, phase contrast microscope and electron microscope.
06.05 Describe the various parts of the compound light microscope.
06.06 Define terms related to microbiology, such as resolution, fixation and staining.
06.07 Name five groups of microorganisms that make up the protist classification.
06.08 Describe the relative size of bacteria, viruses, yeasts and molds.
06.09 List some examples of both beneficial and harmful functions and activities of the protist, yeasts, molds, bacteria, etc.
06.10 Explain the structure and types of yeasts, bacteria, viruses, etc.
06.11 Explain the manner of reproduction of organisms, such as yeasts, moles, bacteria, viruses, etc.
06.12 List several harmful and beneficial activities of yeasts, molds, bacteria, viruses, etc.
06.13 Define protozoa and describe their structure and function.
06.14 Differentiate between pathogenic and nonpathogenic bacteria.
06.15 Describe the structure and functions of parasite and saprophytes.
06.16 Describe the manner in which a parasite obtains nourishment for growth and development.
06.17 Discuss bacterial spore formation and the implications for sterilization and infection control in the dental environment.
06.18 List the conditions required for bacterial growth.
06.19 Discuss conditions that can limit or inhibit bacterial growth.
06.20 Explain the differences between aerobic and anaerobic bacteria.
06.21 Describe how bacteria grow and multiply.
06.22 Discuss favorable conditions for reproduction of bacteria.
06.23 Discuss methods of bacterial disease transmission.
06.24 List four portals of entry of bacteria into the body.
06.25 Discuss the factors which will determine whether or not a bacterial invasion will cause a disease.
06.26 Discuss ways in which bacteria and other microorganisms can exist in the body.
06.27 Discuss two ways that bacteria can cause disease.
06.28 List and explain the body defense mechanisms.
06.29 Define terms related to immunity and antibodies.
06.30 Differentiate between localized and generalized infections.
06.31 Explain immunity.
06.32 Differentiate between natural and acquired immunity, active and passive immunity.

06.33 Define terms antigen, autoimmunity, hypersensitivity, allergy, anaphylaxis toxic and toxoid.
06.34 Discuss vaccines and their purpose.
06.35 List four ways that vaccines can be produced.
06.36 Discuss the use of immune serums and the type of immunity they produce.
06.37 List four physical means of destroying bacteria.
06.38 Discuss and compare the relative effectiveness of different physical means of destroying bacteria.
06.39 Discuss widely used and effective means of sterilizing dental instruments.
06.40 Describe how bacteria can be destroyed by chemical means.
06.41 Discuss the difference between an antiseptic and disinfectant, and their appropriate uses.
06.42 List the three mechanisms of action of antibiotics.
06.43 Discuss the difference between trade names and generic names of drugs.
06.44 Discuss potentially harmful aspects of antibiotics.
06.45 Describe and discuss the purpose of antibiotic sensitivity tests.
06.46 Describe the measures used in all health care facilities for infection control.

12.0 IDENTIFY PROPERTIES, USES AND MANIPULATION OF DENTAL MATERIALS WHICH INCLUDE GYPSUM, RESTORATIVE MATERIAL, ACRYLICS, DENTAL CEMENTS, IMPRESSION MATERIALS AND WAXES -- The student will be able to:

12.01 Demonstrate an understanding of the composition of dental materials, their physical properties and chemical properties and the manner in which the properties relate to manipulation.
12.02 Demonstrate the manipulative skills necessary to properly prepare dental materials for use both intraorally and extraorally.
12.03 Identify the primary objectives of the Council on Dental Materials and Devices of the American Dental Association.
12.04 Identify the two international organizations responsible for establishing standards for dental materials.
12.05 Describe the physical conditions in the oral cavity which influence the selection of dental materials.
12.06 Describe the biological characteristics of dental materials which may limit their use in the oral cavity.
12.07 List the three factors which must be considered when selecting dental materials.
12.08 Define terms related to dental materials and science.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Dental Assisting

CODE NUMBER: Secondary ______ Postsecondary H170101

Florida CIP 0317.010100

SECONDARY SCHOOL CREDITS ____ COLLEGE CREDITS ____ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: DENTAL HYG @5 DENTAL ASST @7 G †DENTAL TEC @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dental assistants (66002436) and dental auxiliaries (dental assistants) or to provide supplemental training for persons previously or currently employed in this occupation and to take the Dental Assisting National Board Examination. The program should meet the requirements of the Commission on Dental Accreditation of the American Dental Association and standards recommended by the Florida Board of Dentistry.

The content includes, but is not limited to, dental office and patient management, basic dental laboratory procedures, dental and generalanatomy, dental terminology, nutrition, dental instrument and equipment utilization, microbiology, dental pharmacology and anesthesia, chairside assisting and expanded functions, dental office emergencies/CPR, dental radiography, maintenance and asepsis of dental operatory and instrumentation, dental specialty procedures, employability skills, leadership and human relations skills, ethics and jurisprudice, dental materials and preventive dentistry.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Students are provided with realistic clinical/laboratory experiences during an externship in dental offices and clinics as a part of this program.

III. SPECIAL NOTE: The American Dental Assisting Association and the Health Occupations Students of America, Inc. are the appropriate vocational student organizations for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for exit from this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0, Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The student must show proof of graduation from high school or evidence of a GED. This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The approximate length of this program for the average achieving student is one academic year of fulltime study or the equivalent.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Perform chairside assisting for specialty procedures.
02. Record patient assessment data.
03. Perform general office procedures.
04. Identify structures and explain functions and pathologies of dental and general anatomy.
05. Identify, describe, maintain and utilize instruments and equipment.
06. Identify principles of microbiology and disease prevention and perform infection control procedures.
07. Identify the functions of pharmacology and anesthesia as they relate to dentistry.
08. Assist in administering dental office emergency care and cardiopulmonary resuscitation.
09. Identify and perform dental radiographic procedures.
10. Identify properties and uses, and manipulate dental materials.
11. Describe principles and perform techniques of preventive dentistry.
12. Describe the legal and ethical responsibilities of the dental health care worker.
13. Demonstrate employability skills.
14. Demonstrate knowledge of communicable diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Dental Assisting POSTSECONDARY NUMBER: H170101

01.0 PERFORM CHAIRSIDE ASSISTING FOR SPECIALTY PROCEDURES -- The student will be able to:

01.01 Apply principles of four handed dentistry.
01.02 Evacuate and maintain the operating field.
01.03 Perform expanded functions as permitted by the Florida statute/law pertaining to dentistry.
01.04 Assemble instruments and assist in general and specialty dental procedures.
01.05 Prepare tray set-ups for specific specialty procedures.

02.0 RECORD PATIENT ASSESSMENT DATA -- The student will be able to:

02.01 Take and record medical-dental histories.
02.02 Take and record vital signs.
02.03 Perform a visual assessment of existing oral conditions.
02.04 Record conditions diagnosed by the dentist.

03.0 PERFORM GENERAL OFFICE PROCEDURES -- The student will be able to:

03.01 Maintain appointment control.
03.02 Maintain an active recall system.
03.03 Prepare and maintain accurate patient records.
03.04 Prepare and maintain patient financial records, collect fees.
03.05 Prepare and maintain office financial records.
03.06 Prepare and maintain dental office inventory control and purchasing.
03.07 Demonstrate public relations responsibilities of the secretary/receptionist.
03.08 Demonstrate skills on office equipment.
03.09 Maintain office environment.
03.10 Receive and dismiss patients and visitors.

04.0 IDENTIFY STRUCTURES AND EXPLAIN FUNCTIONS AND PATHOLOGIES OF DENTAL AND GENERAL ANATOMY -- The student will be able to:

04.01 Identify structures and functions of head and neck anatomy including bones, muscles, sinuses, salivary glands, nerves and blood vessels.
04.02 Identify embryonic development of head, oral cavity, and teeth.
04.03 Identify teeth and their landmarks.
04.04 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
04.05 Recognize and describe oral pathological conditions.

05.0 IDENTIFY, DESCRIBE, MAINTAIN AND UTILIZE DENTAL INSTRUMENTS AND EQUIPMENT -- The student will be able to:

05.01 Identify various types, functions and operations of dental operatory and laboratory equipment.
05.02 Identify types and functions of operative, restorative, surgical, prosthodonic, orthodonic and endodontic dental instruments.
05.03 Maintain dental operatory equipment and instruments.
05.04 Identify types and functions of specific dental hygiene instruments with emphasis on category rather than individual instruments.

06.0 IDENTIFY PRINCIPLES OF MICROBIOLOGY AND DISEASE PREVENTION AND PERFORM INFECTION CONTROL PROCEDURES -- The student will be able to:

06.01 Differentiate between pathogenic and non-pathogenic microorganisms.
06.02 Describe pathogens and modes of disease transmission.
06.03 Differentiate between aseptic and non-aseptic environments.
06.04 Perform aseptic handwashing technique.
06.05 Describe and apply methods of cleaning, disinfection and sterilization.

07.0 IDENTIFY THE FUNCTIONS OF PHARMACOLOGY AND ANESTHESIA AS THEY RELATE TO DENTISTRY -- The student will be able to:

07.01 Identify drug requirements, agencies, and regulations.
07.02 Record a drug prescription on patient's chart.
07.03 Identify drug actions, side effects, indications and contraindications; verify with Physician's Desk Reference or its equivalent.
07.04 Identify common drugs used in dentistry.
07.05 Prepare and apply topical anesthetic agent.
07.06 Identify properties of anesthetics.
07.07 Prepare syringes for the administration of local anesthetics.
07.08 Monitor and identify precautions in the use of nitrous oxide-oxygen conscious sedation.
07.09 Identify drugs and chemicals used for infection control in the dental office.

08.0 ASSIST IN ADMINISTERING DENTAL OFFICE EMERGENCY CARE AND CARDIOPULMONARY RESUSCITATION -- The student will be able to:

08.01 Describe dental office emergencies and their prevention and treatment.
08.02 Assist and maintain medical emergency care to include cardiopulmonary resuscitation.

09.0 IDENTIFY AND PERFORM DENTAL RADIOGRAPHIC PROCEDURES -- The student will be able to:

09.01 Describe history, physics and biological effects of ionizing radiation.
09.02 Identify parts of the X-ray machine including accessories.
09.03 Demonstrate radiologic health protection techniques.
09.04 Perform dark room/processing procedures, mix solutions.
09.05 Expose radiographs utilizing intra-oral/extra-oral techniques.
09.06 Identify radiographic anatomical landmarks.
09.07 Mount radiographic surveys.
09.08 Maintain unexposed film inventory and storage.

10.0 IDENTIFY PROPERTIES AND USES, AND MANIPULATE DENTAL MATERIALS -- The student will be able to:

10.01 Identify properties and uses and manipulate gypsum.
10.02 Identify properties and uses and manipulate restorative materials.
10.03 Identify properties and uses and manipulate dental cements.
10.04 Identify properties and uses and manipulate impression materials.
10.05 Identify properties and uses and manipulate acrylics and/or thermoplastics.
10.06 Identify properties and uses and manipulate waxes.
10.07 Perform dental laboratory procedures to include the fabrication of casts, custom trays and/or temporary crowns and bridges.
10.08 Clean and polish removable dental appliances.

11.0 DESCRIBE PRINCIPLES AND PERFORM TECHNIQUES OF PREVENTIVE DENTISTRY -- The student will be able to:

11.01 Identify and instruct patients on applicable methods of preventive dentistry.

11.02 Prepare set up for oral prophylaxis and apply anticariogenic treatments.
11.03 Identify the elements of nutrition, basic food groups and acceptable diets.
11.04 Identify deficiencies that manifest symptoms in the oral cavity.

12.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER -- The student will be able to:

12.01 Define commonly used legal vocabulary relating to dentistry.
12.02 Describe ethical considerations/obligations in the dental team-patient relationship.
12.03 Explain risk management.
12.04 Identify areas of Florida Statute 466 and Rule chapter 21 applicable to practice by the dental health workers.

13.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

13.01 Conduct a job search.
13.02 Secure information about a job.
13.03 Identify documents that may be required when applying for a job.
13.04 Complete a job application correctly.
13.05 Demonstrate acceptable behavior in job interview techniques.
13.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
13.07 Identify acceptable work habits.
13.08 Demonstrate knowledge of how to make job changes appropriately.
13.09 Demonstrate acceptable employee health habits.

14.0 DEMONSTRATE KNOWLEDGE OF COMMUNICABLE DISEASES, INCLUDING AIDS -- The student will be able to:

14.01 Distinguish between fact and fallacy about the transmission and treatment of communicable diseases.
14.02 Identify community resources and services available to the victims of communicable diseases.
14.03 Identify "at risk" behaviors which promote the spread of communicable diseases and the public education necessary to combat the spread of these diseases.
14.04 Apply infection control techniques designed to prevent the spread of communicable diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
14.05 Demonstrate knowledge of the legal aspects of communicable diseases.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Dental Hygiene

CODE NUMBER: Secondary _______ Postsecondary ______

Florida CIP 0317.010200

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational ______ Other ____________________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dental hygienists (32908212) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, office management, basic dental laboratory procedures, dental and general anatomy, nutrition, dental hygiene instrumentation, microbiology, pharmacology and anesthesia, chairside assisting dental office emergencies, dental radiography, employability skills, ethics and jurisprudice, dental materials, preventive dentistry, expanded functions, patient assessment and direct patient services, and community health.

II. LABORATORY ACTIVITIES: Simulation activities and clinical laboratory experiences with clinical patients are integrated with the didactic portion of the program. Dental operatory equipment is essential.

III. SPECIAL NOTE: The Student American Dental Hygienists' Association is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

The students should be eligible to sit for the American Dental Association National Board Dental Hygiene Examination and the Florida Dental Hygiene Licensure Examination. The program should meet the requirements of the Commission on Accreditation of the American Dental Association and approved by the Florida State Board of Dentistry.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to perform intended outcomes three (3) through fourteen (14) of the Dental Assisting curriculum framework and the following:

01. Identify and explain functions of dental anatomical landmarks and describe pathological conditions of the teeth, soft tissues and supporting structures of the oral cavity.

02. Identify and explain principles of microbiology, disease transmission, disease prevention and perform principles of infection control procedures relating to dental care.
03. Identify and explain usage, administration, indications, contraindications, adverse reactions and precautions of pharmaceutical and anesthetic agents used in the treatment of dental disease and of those agents which may influence patient care while receiving dental treatment.
04. Describe principles and perform techniques of preventive dentistry.
05. Perform patient assessment.
06. Perform direct patient services.
07. Implement and evaluate community health interventions and research activities.

STUDENT PERFORMANCE STANDARDS   EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations   SECONDARY NUMBER: ______

PROGRAM TITLE: Dental Hygiene   POSTSECONDARY NUMBER: 0317.010200

01.0 IDENTIFY AND EXPLAIN FUNCTIONS OF DENTAL ANATOMICAL LANDMARKS AND DESCRIBE PATHOLOGICAL CONDITIONS OF THE TEETH, SOFT TISSUES AND SUPPORTING SUTRUCTURES OF THE ORAL CAVITY -- The student will be able to:

01.01 Describe and differentiate between normal and malocclusion.
01.02 Identify the elements of the chemical basis of life, cellular metabolism and the structure of the major tissue types of the human body.
01.03 Describe the metabolism of nutrient foods, vitamins and minerals by the human body and pathological conditions related to nutrient deficiencies.
01.04 Identify anatomical structures and physiological function of the principle systems of the human body including the skeletal, muscular, integumentary, circulatory, lymphatic, endocrine, digestive, reproductive, respiratory, urinary, and nervous systems.
01.05 Recognize and describe oral pathological conditions related to the teeth and their supporting structures.
01.06 Identify teeth and their landmarks, and the morphological characteristics of each individual tooth.
01.07 Recognize and describe developmental anomalies related to the teeth, face, and oral structures.

02.0 IDENTIFY AND EXPLAIN PRINCIPLES OF MICROBIOLOGY, DISEASE TRANSMISSION, DISEASE PREVENTION AND PERFORM PRINCIPLES OF INFECTION CONTROL PROCEDURES RELATING TO DENTAL CARE -- The student will be able to:

02.01 Demonstrate the use of the microscope.
02.02 Collect and prepare slides for examination for pathology.
02.03 Recognize the need for and proper precautions for the prevention of disease transmission during all dental related procedures.
02.04 Identify the role of procaryotic cells, eucaryotic cells, viruses, and bacteria in the infections and mechanisms of diseases.
02.05 Identify the genetics of microbes including replication of DNA and protein synthesis, mutation and gene transfer.

03.0 IDENTIFY AND EXPLAIN USAGE, ADMINISTRATION, INDICATIONS, CONTRAINDICATIONS, ADVERSE REACTIONS AND PRECAUTIONS OF PHARMACEUTICAL AND ANESTHETIC AGENTS USED IN THE TREATMENT OF DENTAL DISEASE AND OF THOSE AGENTS WHICH MAY INFLUENCE PATIENT CARE WHILE RECEIVING DENTAL TREATMENT. -- The student will be able to:

03.01 Recognize specific conditions in the oral cavity and modify hygiene treatment plan when indicated.
03.02 Describe methods of administering local anesthetics.
03.03 Identify the tissues innervated by each of the nerves associated with dental local anesthesia.
03.04 Describe properties and mode of action of the ideal local anesthetic.
03.05 List medical considerations in choosing a local anesthetic.
03.06 Describe the process of drug metabolism.

04.0 DESCRIBE PRINCIPLES AND PERFORM TECHNIQUES OF PREVENTIVE DENTISTRY -- The student will be able to:

04.01 Preform oral prophylaxis and anticariogenic treatments.
04.02 Identify deficiences that manifest symptoms in the oral cavity and describe therapies.

04.03 Formulate and present diets to address specific dental needs and provide nutritional counseling.

05.0 PERFORM PATIENT ASSESSMENT -- The student will be able to:

05.01 Take, record, and correlate medical/dental history with dental hygiene treatment plan and services to be performed.
05.02 Recognize all contraindications to dental treatment in medical and dental history and initiate remedial actions or referrals.
05.03 Take, record, and correlate vital sign observations with dental hygiene treatment plan and services to be performed.
05.04 Perform, record and correlate extraoral and intraoral examination findings with dental hygiene treatment plan and patient services to be performed.
05.05 Conduct complete periodontal examination including probing, radiographic interpretation, mobility assessment and tissue description.
05.06 Consult with dentist and physicians to verify dental and medical information and develop the treatment plan to be implemented.
05.07 Observe and record existing restorations, conditions, and pathologies.
05.08 Interpret and correlate dental radiographs and dental charting with dental hygiene treatment plan.
05.09 Assess the patients nutritional status and prepare recommendations.
05.10 Perform soft tissue reassessment and evaluate the effects of initial dental hygiene therapy and make appropriate referrals.
05.11 Recognize systemic diseases from oral manifestations.
05.12 Record diagnosis made by dentist.

06.0 PERFORM DIRECT PATIENT SERVICES -- The student will be able to:

06.01 Detect calculus for removal and differentiate between deposits and other causes of tooth surface roughness.
06.02 Scale teeth, removing accretions with hand instruments.
06.03 Root plane to remove altered cementum.
06.04 Manipulate mechanical instruments for deposit removal, i.e., ultrasonics and prophyjet.
06.05 Perform soft tissue curettage with appropriate instruments.
06.06 Apply desensitizing agents where applicable.
06.07 Clean and polish removable appliances.
06.08 Direct patient in all home therapies to maintain and restore soft tissue health.
06.09 Provide dietary counseling for health maintenance and specific healing needs.
06.10 Provide recommendations for patient use of caries prevention agents.
06.11 Perform expanded functions as permitted by Florida statutes/law pertaining to dentistry.

07.0 IMPLEMENT AND EVALUATE COMMUNITY HEALTH INTERVENTIONS AND RESEARCH ACTIVITIES -- The student will be able to:

07.01 Demonstrate knowledge of assessment, planning, implementation and evaluation of community health interventions.
07.02 Formulate and analyze research methodologies for community health interventions.
07.03 Interpret research findings in scientific literature.
07.04 Apply research findings to dental hygiene care delivery.
07.05 Apply statistical analysis to health trends and community interventions.

CURRICULUM FRAMEWORK
PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION
EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Dental Laboratory Assisting

CODE NUMBER: Secondary 8403000 Postsecondary ______

Florida CIP 0317.019901

SECONDARY SCHOOL CREDITS 6
COLLEGE CREDITS ______
POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

______ Postsecondary Vocational x Other 9-12, 30, 31

CERTIFICATION COVERAGE: DEN LABTEC @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dental laboratory technician apprentices (712.381-022) or dental laboratory assistants or to pursue further education in the dental health field.

The content includes, but is not limited to, communication skills, legal and ethical practice, leadership and employability skills, safe and efficient work practices, and entry level skills for dental laboratory practice.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8403010	Dental Laboratory Assisting 1
8403020	Dental Laboratory Assisting 2
8403030	Dental Laboratory Assisting 3
8403040	Dental Laboratory Assisting 4
8403050	Dental Laboratory Assisting 5
8403060	Dental Laboratory Assisting 6

II. LABORATORY ACTIVITIES: Simulation laboratory experiences are integrated with the didactic portion of this program. Students perform tasks representative of dental laboratory practice.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of basic math skills.
02. Demonstrate basic science competencies.
03. Demonstrate accepted communication skills in the laboratory.
04. Demonstrate employability skills.
05. Demonstrate ethical behavior and legal aspects in the laboratory.
06. Identify an entry level job and advanced training program which meets career goals.
07. Identify anatomic structure and function of body systems in relation to dental laboratory science.
08. Practice selected dental laboratory techniques.
09. Recognize and practice acceptable behavior in the laboratory setting.
10. Practice accepted principles of safety in the laboratory setting.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8403000

PROGRAM TITLE: Dental Laboratory Assisting POSTSECONDARY NUMBER: _______

01.0 DEMONSTRATE KNOWLEDGE OF BASIC MATH SKILLS
-- The student will be able to:

01.01 Draw, read, and analyze and report on graphs, charts, and tables.
01.02 Measure time, temperature, distance, capacity and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Calculate using appropriate dental laboratory formulae.
01.05 Calculate ratios.

02.0 DEMONSTRATE BASIC SCIENCE COMPETENCIES
-- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Demonstrate ability to evaluate and draw conclusions.

03.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILLS IN THE LABORATORY
-- The student will be able to:

03.01 Recognize and utilize various forms of communication.
03.02 Recognize barriers to communication.
03.03 Use appropriate dental terminology and abbreviations.
03.04 Recognize and report signs of abuse and neglect.
03.05 Distinguish factual reports and personal opinion.
03.06 Demonstrate ability to report observations in written or oral form.
03.07 Demonstrate the ability to interpret dental prescriptions.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application properly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 DEMONSTRATE ETHICAL BEHAVIOR AND LEGAL ASPECTS IN THE LABORATORY
-- The student will be able to:

05.01 Recognize limits of authority and responsibility of health care workers.
05.02 Identify patient rights and responsibilities.
05.03 Understand legal ramifications of actions/inactions in the health field.

06.0 IDENTIFY AN ENTRY LEVEL JOB AND ADVANCED TRAINING PROGRAM WHICH MEETS CAREER GOALS -- The student will be able to:

06.01 Identify appropriate employment and educational opportunities.
06.02 Identify and demonstrate proper work ethic.
06.03 Complete a job application correctly.
06.04 Participate in an interview.

06.05 Write a follow-up letter.

07.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DENTAL LABORATORY SCIENCE -- The student will be able to:

07.01 Describe the structure and function of head and neck anatomy.
07.02 Apply understanding of head and neck anatomy in relation to patient use of dental appliances.
07.03 Demonstrate knowledge of infection control in accordance with Center for Disease Control (CDC) guidelines.

08.0 PRACTICE SELECTED DENTAL LABORATORY TECHNIQUES -- The student will be able to:

08.01 Fabricate selected dental restorations.
08.02 Fabricate selected prostheses.
08.03 Fabricate selected dental appliances.

09.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE LABORATORY SETTING -- The student will be able to:

09.01 Demonstrate an understanding of positive self concepts.
09.02 Identify basic human needs.
09.03 Recognize atypical behavior.

10.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN THE LABORATORY SETTING -- The student will be able to:

10.01 Demonstrate safe use, care and maintenance of equipment and materials.
10.02 Properly identify and label models, prostheses, etc.
10.03 Use good observational skills and report appropriately.
10.04 Follow emergency procedures as outlined by institution.
10.05 Demonstrate knowledge of sterile technique and disease prevention.

STUDENT PERFORMANCE STANDARDS | EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health | COURSE CREDIT: 1

PROGRAM TITLE: Dental Laboratory Assisting | PROGRAM NUMBER: 8403000

COURSE TITLE: Dental Laboratory Assisting 1 | COURSE NUMBER: 8403010

COURSE DESCRIPTION: This course prepares the student with communication, career development, and employability skills relevant to Dental Laboratory Assisting.

03.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILLS IN THE LABORATORY -- The student will be able to:

03.01 Recognize and utilize various forms of communication.
03.02 Recognize barriers to communication.
03.03 Use appropriate dental terminology and abbreviations.
03.04 Recognize and report signs of abuse and neglect.
03.05 Distinguish factual reports and personal opinion.
03.06 Demonstrate ability to report observations in written or oral form.
03.07 Demonstrate the ability to interpret dental prescriptions.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application properly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

06.0 IDENTIFY AN ENTRY LEVEL JOB AND ADVANCED TRAINING PROGRAM WHICH MEETS CAREER GOALS -- The student will be able to:

06.01 Identify appropriate employment and educational opportunities.
06.02 Identify and demonstrate proper work ethic.
06.03 Complete a job application correctly.
06.04 Participate in an interview.
06.05 Write a follow-up letter.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health
COURSE CREDIT: 1

PROGRAM TITLE: Dental Laboratory Assisting
PROGRAM NUMBER: 8403000

COURSE TITLE: Dental Laboratory Assisting 2
COURSE NUMBER: 8403020

COURSE DESCRIPTION: This course prepares students with ethical, legal, behavioral, scientific and math skills.

01.0 DEMONSTRATE KNOWLEDGE OF BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, and analyze and report on graphs, charts, and tables.
01.02 Measure time, temperature, distance, capacity and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Calculate using appropriate dental laboratory formulae.
01.05 Calculate ratios.

02.0 DEMONSTRATE BASIC SCIENCE COMPETENCIES -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observations and experimentation.
02.03 Demonstrate ability to evaluate and draw conclusions.

05.0 DEMONSTRATE ETHICAL BEHAVIOR AND LEGAL ASPECTS IN THE LABORATORY -- The student will be able to:

05.01 Recognize limits of authority and responsibility of health care workers.
05.02 Identify patient rights and responsibilities.
05.03 Understand legal ramifications of actions/inactions in the health field.

07.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DENTAL LABORATORY SCIENCE -- The student will be able to:

07.01 Describe the structure and function of head and neck anatomy.
07.02 Apply understanding of head and neck anatomy in relation to patient use of dental appliances.
07.03 Demonstrate knowledge of infection control in accordance with Center for Disease Control (CDC) guidelines.

09.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE LABORATORY SETTING -- The student will be able to:

09.01 Demonstrate an understanding of positive self concepts.
09.02 Identify basic human needs.
09.03 Recognize atypical behavior.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health COURSE CREDIT: 1

PROGRAM TITLE: Dental Laboratory Assisting PROGRAM NUMBER: 8403000

COURSE TITLE: Dental Laboratory Assisting 3 COURSE NUMBER: 8403030

COURSE DESCRIPTION: This course prepares students to practice dental laboratory techniques in a safe laboratory setting.

08.0 PRACTICE SELECTED DENTAL LABORATORY TECHNIQUES -- The student will be able to:

08.01 Fabricate selected dental restorations.
08.02 Fabricate selected prostheses.
08.03 Fabricate selected dental appliances.

10.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN THE LABORATORY SETTING -- The student will be able to:

10.01 Demonstrate safe use, care and maintenance of equipment and materials.
10.02 Properly identify and label models, prostheses, etc.
10.03 Use good observational skills and report appropriately.
10.04 Follow emergency procedures as outlined by institution.
10.05 Demonstrate knowledge of sterile technique and disease prevention.

STUDENT PERFORMANCE STANDARDS

PROGRAM AREA: Health

PROGRAM TITLE: Dental Laboratory Assisting

COURSE TITLE: Dental Laboratory Assisting 4

EFFECTIVE DATE: July, 1993

COURSE CREDIT: 1

PROGRAM NUMBER: 8403000

COURSE NUMBER: 8403040

COURSE DESCRIPTION: This course is a practicum (clinical experience) which covers all aspects of Dental Laboratory Assisting. Dental Laboratory Assisting #1, 2, and 3 are pre-requisites to this course.

STUDENT PERFORMANCE STANDARDS

PROGRAM AREA:	Health	EFFECTIVE DATE:	July, 1993
PROGRAM TITLE:	Dental Laboratory Assisting	COURSE CREDIT:	1
COURSE TITLE:	Dental Laboratory Assisting 5	PROGRAM NUMBER:	8403000
		COURSE NUMBER:	8403050

COURSE DESCRIPTION: This course is a practicum (clinical experience) which covers all aspects of Dental Laboratory Assisting. Dental Laboratory Assisting #1, 2, 3, and 4 are pre-requisites to this course.

STUDENT PERFORMANCE STANDARDS

PROGRAM AREA:	Health	EFFECTIVE DATE:	July, 1993
PROGRAM TITLE:	Dental Laboratory Assisting	COURSE CREDIT:	1
COURSE TITLE:	Dental Laboratory Assisting 6	PROGRAM NUMBER:	8403000
		COURSE NUMBER:	8403060

COURSE DESCRIPTION: This course is a practicum (clinical experience) which covers all aspects of Dental Laboratory Assisting. Courses #1, 2, 3, 4, and 5 are pre-requisites to this course. Students should be employable at the aide level in a dental laboratory.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Dental Laboratory Technology

CODE NUMBER: Secondary _______ Postsecondary H170103

Florida CIP 0317.010300

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: †DENTAL TEC @7 G DEN LABTEC @7 G

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for entry level employment as dental laboratory technicians (89921738) or to provide supplemental training for persons previously or currently employed in this occupation.

The content of the program includes, but is not limited to, general studies, physical sciences, dental sciences, and dental laboratory techniques.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES**: Laboratory activities are integrated with the didactic portion of this program. Students perform representative tasks in the manufacture of dental prostheses.

III. **SPECIAL NOTE**: The Health Occupations Students of America, Inc., is an appropriate vocational student organization as well as participation in a career related professional organization(s) for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

The program should meet the requirements of the Commission on Accreditation of the Dental and Dental Auxiliary Educational Programs of the American Dental Association. Students should be prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 1500 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Apply basic science skills.
02. Apply basic math skills.
03. Use verbal and written communications.
04. Demonstrate employability skills.
05. Identify the anatomic structure and function of body systems in relation to prosthetic services performed by the dental laboratory technician.
06. Practice quality assurance, safety and acceptable communication skills.
07. Adhere to legal and ethical principles related to the practice of dental laboratory technology.
08. Demonstrate knowledge of effective business management techniques.
09. Demonstrate knowledge of dental sciences.
10. Perform basic dental laboratory techniques consistent with current dental laboratory practice.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Dental Laboratory Technology POSTSECONDARY NUMBER: H170103

01.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

01.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
01.02 Organize and communicate the results obtained by observation and experimentation.
01.03 Demonstrate ability to evaluate and draw conclusions.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Read, interpret and report on graphs, charts and tables.
02.02 Make estimates and approximations and judge the reasonableness of the result.

03.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

03.01 Identify and use various forms of communications.
03.02 Identify barriers to communication.
03.03 Use basic medical terminology and approved abbreviations.
03.04 Demonstrate effective interpersonal relationships.
03.05 Maintain current documentation.
03.06 Demonstrate proper telephone skills.
03.07 Demonstrate basic computer skills.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application properly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO PROSTHETIC SERVICES PERFORMED BY THE DENTAL LABORATORY TECHNICIAN -- The student will be able to:

05.01 Identify structures and functions of head and neck anatomy.
05.02 Identify embryonic development of head, oral cavity and individual teeth.
05.03 Identify each tooth and its landmarks.
05.04 Demonstrate knowledge, principles, and methods of disease transmission and prevention as related to dental prostheses.
05.05 Demonstrate knowledge of infection control in dental laboratories in accordance with Center for Disease Control (CDC) guidelines.

06.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS -- The student will be able to:

06.01 Practice safety in accordance with institutional policy.
06.02 Identify documentation procedures necessary to comply with state laws.
06.03 Demonstrate knowledge of the dental laboratory technicians role

in providing quality assurance in laboratory procedures, reporting, use and maintenance of equipment.

06.04 Communicate appropriately.

06.05 Use appropriate medical terminology and abbreviations.

06.06 Follow approved procedures for labeling and identifying prostheses.

07.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF DENTAL LABORATORY TECHNOLOGY -- The student will be able to:

07.01 Demonstrate knowledge of patient and worker rights and responsibilities.

07.02 Demonstrate knowledge of the importance of observing the doctor/technician relationship.

07.03 Demonstrate knowledge of state law governing the practice of Dental Laboratory Technology.

08.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE BUSINESS MANAGEMENT TECHNIQUES -- The student will be able to:

08.01 Demonstrate knowledge of an office/laboratory procedure manual.

08.02 Demonstrate knowledge of business finance and operating expenses.

08.03 Set up a pay scale and benefit program for employees and a bookkeeping system.

08.04 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.

08.05 Demonstrate knowledge of employee hiring orientation.

09.0 DEMONSTRATE KNOWLEDGE OF DENTAL SCIENCES -- The student will be able to:

09.01 Demonstrate knowledge of physical properties, use and manipulation of dental materials.

09.02 Demonstrate knowledge of the dynamics of occlusion.

09.03 Demonstrate problem solving skills as related to dental materials.

10.0 PERFORM BASIC DENTAL LABORATORY TECHNIQUES CONSISTENT WITH CURRENT DENTAL LABORATORY PRACTICE -- The student will be able to:

10.01 Fabricate complete denture prosthesis.

10.02 Fabricate removable partial denture prosthesis.

10.03 Fabricate fixed prosthesis.

10.04 Fabricate fixed procelain and/or porcelain to metal restorations.

10.05 Fabricate, finish, and polish pedodontic, orthodontic and preventive appliances.

10.06 Fabricate special prosthesis.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Dental Laboratory Technology and Management

CODE NUMBER: Secondary _______ Postsecondary _______

Florida CIP 0317.010301

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational ______ Other

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for entry level employment as dental laboratory technicians, dental laboratory managers, dental laboratory owners, marketing/sales personnel of dental products or to provide supplemental training for persons previously or currently employed in this occupation.

The content of the program includes, but is not limited to, general studies, physical sciences, dental sciences, dental laboratory techniques, dental laboratory management and business principles, computer applications in the dental laboratory, leadership and communications skills.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through college level instruction, applied laboratory procedures or practice, clinical observation and involvement in the dental health care delivery team concept.

The program will include theoretical aspects of subjects as well as the practical applications. The theoretical aspects of the curriculum will provide content necessary for students to make judgements regarding the procedures they are expected to perform.

II. LABORATORY ACTIVITIES: Laboratory activities are integrated with the didactic portion of this program. Students perform representative tasks in the manufacture of dental prostheses and become involved in the dental health team through first hand observation in clinical procedures as they relate to laboratory techniques.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

The program should meet the requirements of the Commission on Accreditation of the Dental and Dental Auxiliary Educational Programs of the American Dental Association. Students should be prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Identify the anatomic structure and function of body systems in relation to prosthetic services performed by the dental laboratory technician.
02. Practice quality assurance, safety and acceptable communication skills.
03. Adhere to legal and ethical principles related to the practice of dental laboratory technology.
04. Demonstrate knowledge of effective business management techniques.
05. Demonstrate knowledge of dental sciences.
06. Perform basic dental laboratory techniques consistent with current dental laboratory practice.
07. Demonstrate employability skills.
08. Demonstrate knowledge, principles and methods of disease transmission and prevention.
09. Demonstrate skills for marketing and sales of dental products.

STUDENT PERFORMANCE STANDARDS   EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations   SECONDARY NUMBER:

PROGRAM TITLE: Dental Laboratory Technology and Management   POSTSECONDARY NUMBER: 0317.010301

01.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO PROSTHETIC SERVICES PERFORMED BY THE DENTAL LABORATORY TECHNICIAN

-- The student will be able to:

01.01 Identify structures and functions of head and neck anatomy.
01.02 Identify embryonic development of head, oral cavity and individual teeth.
01.03 Identify each tooth and its landmarks.

02.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS

-- The student will be able to:

02.01 Practice safety in accordance with institutional policy.
02.02 Identify documentation procedures necessary to comply with state laws.
02.03 Demonstrate knowledge of the dental laboratory technicians role in providing quality assurance in laboratory procedures, reporting, use and maintenance of equipment.
02.04 Communicate appropriately and effectively.
02.05 Use appropriate medical terminology and abbreviations.
02.06 Follow approved procedures for labeling and identifying prostheses.
02.07 Write business letters.
02.08 Establish a dental laboratory policy for maintenance of equipment.

03.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF DENTAL LABORATORY TECHNOLOGY

-- The student will be able to:

03.01 Demonstrate knowledge of patient and worker rights and responsibilities.
03.02 Demonstrate knowledge of the importance of observing the doctor/technician relationship.
03.03 Demonstrate knowledge of state law governing the practice of Dental Laboratory Technology.

04.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE BUSINESS MANAGEMENT TECHNIQUES

-- The student will be able to:

04.01 Develop an office/laboratory procedure manual.
04.02 Demonstrate knowledge of business finance and operating expenses.
04.03 Set up a pay scale and benefit program for employees and a bookkeeping system.
04.04 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
04.05 Demonstrate knowledge of employee hiring orientation.
04.06 Demonstrate knowledge of computer applications in the dental laboratory.
04.07 Design a dental laboratory and identify appropriate equipment.
04.08 Establish quality control procedures.

05.0 DEMONSTRATE KNOWLEDGE OF DENTAL SCIENCES

-- The student will be able to:

05.01 Demonstrate knowledge of physical properties, use and manipulation of dental materials.
05.02 Demonstrate knowledge of the dynamics of occlusion.

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05.03 Demonstrate problem solving skills as related to dental materials.

06.0 PERFORM BASIC DENTAL LABORATORY TECHNIQUES CONSISTENT WITH CURRENT DENTAL LABORATORY PRACTICE -- The student will be able to:

06.01 Fabricate complete denture prosthodontics.
06.02 Fabricate removable partial denture prosthodontics.
06.03 Fabricate fixed prosthodonics.
06.04 Fabricate fixed procelain and/or porcelain to metal restorations.
06.05 Fabricate, finish, and polish pedodontic, orthodontic, and preventive appliances.
06.06 Fabricate special prosthesis.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

07.01 Conduct a job search.
07.02 Secure information about a job.
07.03 Identify documents that may be required when applying for a job.
07.04 Complete a job application properly.
07.05 Demonstrate competence in job interview techniques.
07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
07.07 Identify acceptable work habits.
07.08 Demonstrate knowledge of how to make job changes appropriately.
07.09 Demonstrate acceptable employee health habits.

08.0 DEMONSTRATE KNOWLEDGE, PRINCIPLES, AND METHODS OF DISEASE TRANSMISSION AND PREVENTION -- The student will be able to:

08.01 Establish infection control in dental laboratories in accord with Centers for Disease Control guidelines.
08.02 Demonstrate knowledge, principles and methods of disease transmission and prevention as related to dental prostheses.
08.03 Establish an infection control procedures policy for the dental laboratory.

09.0 DEMONSTRATE SKILLS NECESSARY FOR MARKETING AND SALES OF DENTAL PRODUCTS -- The student will be able to:

09.01 Demonstrate effective product evaluation and comparison.
09.02 Identify appropriate consumer populations.
09.03 Discuss dental product application and effectiveness.
09.04 Demonstrate business management skills for record keeping related to marketing.
09.05 Apply economic principles for product distribution and sales.

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CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Diagnostic Medical Sonography Specialist

CODE NUMBER: Secondary ______ Postsecondary

Florida CIP 0317.021201

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 ____ Postsecondary Adult Vocational

X Postsecondary Vocational Certificate ____ Other ______

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as diagnostic medical sonographers or to provide supplemental training for persons previously or currently employed in this occupation. The program should meet th requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA) so that graduates may take the national registry examination.

The content includes, but is not limited to, anatomy, physiology, and pathology of the abdominal, pelvic, and urogenital structures; physics; instrumentation; equipment standards; biological effect of ultrasound; patient care; clinical medicine; applications and limitations of ultrasound; related diagnostic procedures; image evaluation; administration; first aid and cardiopulmonary resuscitation; employability skills; leadership and human relations skills; health and safety.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Supervised clinical learning experiences must be included according to American Medical Association guidelines of sufficient volume and variety to assure competence.

Written clinical affiliation agreements must be maintained with each health care facility. Health care facilities must be accredited by Joint Commission on Accreditation of Hospitals (JCAH).

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. Students are encouraged to become members of their appropriate professional organization.

Students applying for the certificate program should write to the American Registry of Diagnostic Medical Sonographers (ARDMS), 2810 Burnet Avenue, Suite N-2, Cincinnati, Ohio 45219, (513)281-[illegible]. Only ARDMS can determine if an individual qualified for the examination.

The typical length of this program for the average full-time student is 750 hours with a college credit certificate.

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IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

01. Demonstrate an awareness of the uses of ultrasound imaging, types of presentations, orientation, and relationships to other imaging modalities.
02. Demonstrate an awareness of the basic principles of ultrasound physics, emphasizing practical relationships of physics to proper diagnosis.
03. Demonstrate an awareness of ultrasound physics by exploring the various aspects of the field through individual experimentation.
04. Apply knowledge of the anatomy and scanning techniques related to the upper abdominal organs and systems.
05. Demonstrate an awareness of the basic principles of instrumentation common to the field of ultrasound.
06. Apply knowledge gained in instrumentation lecture and work with actual ultrasound scanners similar to those found in local hospitals.
07. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
08. Apply knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
09. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography of the genitourinary system.
10. Develop a continous awareness of the disease processes.
11. Apply accumulated knowledge to the process of creating diagnostic sonograms.
12. Apply skills needed to complete diagnostic images of high quality from a variety of scanning units.
13. Demonstrate awareness of the application of computers in medical technology.
14. Demonstrate employability skills.
15. Demonstrate knowledge of immune-deficiency diseases including AIDS.

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STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER:

PROGRAM TITLE: Diagnostic Medical Sonography Specialist POSTSECONDARY NUMBER: 0317.021201

01.0 DEMONSTRATE AN AWARENESS OF THE USES OF ULTRASOUND IMAGING, TYPES OF PRESENTATIONS, ORIENTATION, AND RELATIONSHIPS TO OTHER IMAGING MODALITIES -- The student will be able to:

01.01 Describe the relationship of ultrasound to other imaging fields.
01.02 Explain the role of the sonographer.
01.03 Describe and explain the proper uses of orientation and standard labeling of ultrasound images.
01.04 Describe/Explain protocol for a sonogram from the time the exam is ordered to the time your patient is ready to be scanned.
01.05 Explain the basic concepts of ultrasound equipment available and demonstrate safety in their use and basic techniques of scanning.
01.06 Explain and use the criteria for film evaluation and specifically of special sonographic parameters.
01.07 Describe special problems encountered and methods to improve medical ethics in sonography.
01.08 Describe the organizational structure common to most hospitals with special emphasis placed on the role of the ultrasound department.
01.09 Describe the relationship of the sonographer to the patients and their special needs.

02.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF ULTRASOUND PHYSICS, EMPHASIZING PRACTICAL RELATIONSHIPS OF PHYSICS TO PROPER DIAGNOSIS -- The student will be able to:

02.01 Explain what sound is and its characteristics.
02.02 Compare the difference between pulsed and continuous wave sound.
02.03 Explain amplitude and intensity of sound as it applies to the field of ultrasound.
02.04 Describe the causes and effects of attenuation and impedance on ultrasound.
02.05 Identify the causes and effects of incidence, scattering and refraction of ultrasound.
02.06 Explain the Doppler effect and its use in medicine.
02.07 Describe the factors of attenuation versus depth penetration of ultrasound in human tissue.
02.08 Identify resolution and controlling factors of resolution as applied to the field of ultrasound.

03.0 DEMONSTRATE AN AWARENESS OF ULTRASOUND PHYSICS BY EXPLORING THE VARIOUS ASPECTS OF THE FIELD THROUGH INDIVIDUAL EXPERIMENTATION -- The student will be able to:

03.01 Discuss and demonstrate the basic principles governing sound and sound interaction in various types of tissue.
03.02 Describe and demonstrate the conditions affecting sound transmission such as the attenuation factors.
03.03 Relate mathematical formulas to the action of sound at interfaces of various qualities.
03.04 Describe resolution and its effect on the final image.
03.05 Describe and demonstrate the factors that control and determine both axial and lateral resolution.

04.0 APPLY KNOWLEDGE OF THE ANATOMY AND SCANNING TECHNIQUES RELATED TO THE UPPER ABDOMINAL ORGANS AND SYSTEMS -- The student will be able to:

04.01 Draw and label the gross upper abdominal organs in both longitudinal and transverse dimensions.

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04.02 Identify the gross upper abdominal anatomy as demonstrated by sonography and common anatomic drawings.
04.03 Explain the physiology of the upper abdominal organs and the related lab examinations.
04.04 Explain the normal preparations for the sonographic demonstration of the upper abdominal organs.
04.05 Explain the protocol for (actual) scanning sonographically the upper abdominal organs.
04.06 Explain the common pathology related to the upper abdomen and correlate with special scanning techniques.
04.07 Demonstrate the normal anatomy of the upper abdomen with a real-time device.
04.08 Explain the various types of equipment and their selection in performing an ultrasound exam.
04.09 Explain and use the various techniques of instrumentation required to create a diagnostic sonogram.
04.10 Explain and use the methods of patient preparation and care before and during a sonogram.
04.11 Present a sonographic exam in completed form.
04.12 Perform a complete ultrasound examination of the upper abdomen with little, if any, assistance (from patient preparation to final reading).
04.13 Demonstrate skills to develop and maintain the special relationship of the sonographer to the patient and to other persons in medicine.
04.14 Demonstrate laboratory safety techniques as related to sonographic imaging units in the patient examination situation.
04.15 Use basic techniques for orientation and labeling of sonographic images.
04.16 Describe the preparations and over-all procedures for a typical ultrasound examination of the upper abdomen.
04.17 Identify gross abdominal structures as demonstrated by ultrasound such as the liver, gall bladder, aorta, inferior vena cava, stomach, pancreas, bowel and spleen.

05.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF INSTRUMENTATION COMMON TO THE FIELD OF ULTRASOUND -- The student will be able to:

05.01 Describe piezoelectric effects.
05.02 Describe both static and real-time transducer construction.
05.03 Discuss historical perspective of scanner development.
05.04 Explain and describe signal processing how it effects image presentations.
05.05 Discuss basic unit construction in the form of block diagrams static, real-time and Doppler.
05.06 Describe the purpose and use of typical controls located on static, real-time and Doppler ultrasound scanners.
05.07 Identify methods of determining and assuring quality control both sonographically and photographically.
05.08 Demonstrate communication skills required on a daily basis in the typical sonography setting.
05.09 Discuss causes, detection and control of factors that may create biologic effects in human tissue with insonation at the diagnostic medical exposure level.

06.0 APPLY KNOWLEDGE GAINED IN INSTRUMENTATION LECTURE AND WORK WITH ACTUAL ULTRASOUND SCANNERS SIMILAR TO THOSE FOUND IN LOCAL HOSPITALS -- The student will be able to:

06.01 Develop and use patient information systems and impressions.
06.02 Explain the various types of transducers available on the market, their construction and selection for sonographic imaging.
06.03 Explain and use amplification in all its forms to produce a diagnostic quality sonogram.
06.04 Explain and use power to produce a diagnostic quality sonogram.
06.05 Explain and use the various forms of processing to produce a diagnostic quality sonogram.

06.06 Explain and use the various types of scanning movements required to produce diagnostic quality sonograms.
06.07 To explain and recognize typical artifacts as found in sonographic imaging and photography.
06.08 Explain and use a test object.

07.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTETRICS AND GYNOCOLOGY -- The student will be able to:

07.01 Describe the basic stages of embryology and sonographic relationships.
07.02 Describe events occurring in the first trimester and their relationship to ultrasound.
07.03 Discuss anatomy, physiology and pathology of the various stages of fetal development as related to ultrasound.
07.04 Discuss anatomy, physiology and pathology of the placenta at all stages of development.
07.05 Describe methods for determining gestational and fetal growth by ultrasound and physical examination methods.
07.06 Identify specific diseases common to the gestational period.
07.07 Describe normal anatomy of the female pelvis and its relationship to ultrasound.
07.08 Explain sonographic evaluation of the female pelvis in the pathologic state.
07.09 Discuss anatomy, physiology and pathology of the female reproductive organs.

08.0 APPLY KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTETRICS AND GYNOCOLOGY -- The student will be able to:

08.01 Compare normal and abnormal states of embryology in the human as demonstrated by ultrasound.
08.02 Explain the normal anatomy of the pregnant uterus and dating techniques of the fetus and placenta.
08.03 Compare the normal and pathologic appearance of the fetus.
08.04 Demonstrate special techniques of ultrasound scanning and collateral processes during pregnancy.
08.05 Describe the normal anatomy and scanning techniques used to demonstrate the female and male pelvis.
08.06 Describe pathology common to the human pelvis and special techniques for demonstrating sonographically.
08.07 Explain the process used to develop pelvic mass charts and their use.
08.08 Compare the normal and pathologic anatomy of the human renal system to include adrenals.
08.09 Describe the scanning techniques common to sonographic imaging of the renals and the adrenals.

09.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY OF THE GENITOURINARY SYSTEM -- The student will be able to:

09.01 Identify anatomy of renals.
09.02 Describe physiology of renals.
09.03 Discuss pathology of renals.
09.04 Explain scanning techniques of renals.
09.05 Discuss anatomy, physiology, pathology and scanning techniques of adrenals.
09.06 Discuss gross anatomy, pathology and scanning techniques of the ureters, urinary bladder, prostate, testicles.

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10.0 DEVELOP A CONTINUOUS AWARENESS OF THE DISEASE PROCESSES -- The student will be able to:

10.01 Discuss basic concepts of the causes of disease.
10.02 Discuss urogenital pathology common to allied health.
10.03 Discuss gastrointestinal diseases.
10.04 Discuss common pathology found in obstetrics and gynocology.
10.05 Discuss common pathology found in the cardiovascular system.
10.06 Discuss common pathology found in the eye and orbit.
10.07 Apply infection control techniques following Center for Disease Control (CDC) guidelines.
10.08 Demonstrate communication skills required to be an effective participant in the health care system.

11.0 APPLY ACCUMULATED KNOWLEDGE TO THE PROCESS OF CREATING DIAGNOSTIC SONOGRAMS -- The student will be able to:

11.01 Complete in all aspects a diagnostic sonogram with emphasis on:
    patient identification
    patient interaction
    general attitude
    creation of sonogram
    safety
    recognition of anatomy, both normal and pathologic.
11.02 Recognize and report symptoms of abuse and neglect.
11.03 Complete routine documentation associated with a typical ultrasound department.
11.04 Recognize legal, ethical and professional responsibilities to patients, physicians and co-workers.

12.0 APPLY SKILLS NEEDED TO COMPLETE DIAGNOSTIC IMAGES OF HIGH QUALITY FROM A VARIETY OF SCANNING UNITS -- The student will be able to:

12.01 Perform complete and diagnostic examinations of the abdomen, pelvis and obstetrical patient using real-time and/or static devices.
12.02 Present completed examinations in detail with justification of all techniques, methods and procedures used to obtain data.
12.03 Identify gross pathology of the abdomen, pelvis and obstetrical patient, both on sonograms and related imaging modalities.
12.04 Perform all preliminary procedures leading to actual examination by sonography and all procedures necessary post examination.
12.05 Demonstrate skills needed to relate with tact and diplomacy with patients, physicians, nurses, other imaging personnel and the general hospital population.
12.06 Demonstrate those characteristics that reflect the high degree of professionalism associated with the field of ultrasound.

13.0 DEMONSTRATE AWARENESS OF THE APPLICATION OF COMPUTERS IN MEDICAL TECHNOLOGY -- The student will be able to:

13.01 Discuss history, types of computers and applications in medicine.
13.02 Discuss word processing and basic programming in BASIC language.
13.03 Create a working program in BASIC language related to their field/interest.
13.04 Demonstrate the use of the micro-computer for word processing.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application properly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.

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14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate acceptable employee health habits.
14.10 Recognize the need for continuing education to maintain and update knowledge and skills in the profession.

15.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
15.02 Identify community resources and services available to the victims of immune-deficiency diseases.
15.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
15.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK — PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION — EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Diagnostic Medical Sonography Technology

CODE NUMBER: Secondary ________ Postsecondary ________

Florida CIP 0317.021200

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____ Postsecondary Adult Vocational

X Postsecondary Vocational ____ Other

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as diagnostic medical sonographers or to provide supplemental training for persons previously or currently employed in this occupation. The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA) so that graduates may take the national registry examination.

The content includes, but is not limited to, anatomy, physiology and pathology of the abdominal, pelvic, and urogenital structures; physics; instrumentation; equipment standards; biological effect of ultrasound; patient care; clinical medicine; applications and limitations of ultrasound; related diagnostic procedures; image evaluation; administration; first aid and cardiopulmonary resuscitation; employability skills; leadership and human relations skills; health and safety.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Supervised clinical learning experiences must be included according to American Medical Association guidelines, of sufficient volume and variety to assure competence.

Written clinical affiliation agreements must be maintained with each health care facility. Health care facilities must be accredited by the Joint Commission on Accreditation of Hospitals (JCAH).

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered in integral part of this program. Students are encouraged to become members of their appropriate professional organization.

Prerequisites: Students must have completed postsecondary education including biological sciences, introductory physics and mathematics before being admitted to the Diagnostic Medical Sonography program. Courses in physics, biology, algebra and geometry are strongly recommended at the high school level.

Students applying for the certificate program should contact the American Registry of Diagnostic Medical Sonographers (ARDMS), 2368 Victory Parkway, Suite 510, Cincinnati, Ohio 45206, (513)281-7111. Only ARDMS can determine if an individual qualifies for the examinations.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate an awareness of the uses of ultrasound imaging, types of presentations, orientation, and relationships to other imaging modalities.
02. Demonstrate an awareness of the basic principles of ultrasound physics, emphasizing practical relationships of physics to proper diagnosis.
03. Demonstrate an awareness of ultrasound physics by exploring the various aspects of the field through individual experimentation.
04. Apply knowledge of the anatomy and scanning techniques related to the upper abdominal organs and systems.
05. Demonstrate an awareness of the basic principles of instrumentation common to the field of ultrasound.
06. Apply knowledge gained in instrumentation lecture and work with actual ultrasound scanners similar to those found in local hospitals.
07. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
08. Apply knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
09. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography of the genitourinary system.
10. Develop a continuous awareness of the disease process.
11. Apply accumulated knowledge to the process of creating diagnostic sonograms.
12. Apply skills needed to complete diagnostic images of high quality from a variety of scanning units.
13. Demonstrate awareness of the application of computers in medical technology.
14. Demonstrate employability skills.
15. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS   EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations   SECONDARY NUMBER: ________

PROGRAM TITLE: Diagnostic Medical Sonography Technology   POSTSECONDARY NUMBER: 0317.021200

01.0 DEMONSTRATE AN AWARENESS OF THE USES OF ULTRASOUND IMAGING, TYPES OF PRESENTATIONS, ORIENTATION, AND RELATIONSHIPS TO OTHER IMAGING MODALITIES -- The student will be able to:

01.01 Describe the relationship of ultrasound to other imaging fields.
01.02 Explain the role of the sonographer.
01.03 Describe and explain the proper uses of orientation and standard labeling of ultrasound images.
01.04 Describe/Explain protocol for a sonogram from the time the exam is ordered to the time your patient is ready to be scanned.
01.05 Explain the basic concepts of ultrasound equipment available and demonstrate safety in their use and basic techniques of scanning.
01.06 Explain and use the criteria for film evaluation and specifically of special sonographic parameters.
01.07 Describe special problems encountered and methods to improve medical ethics in sonography.
01.08 Describe the organizational structure common to most hospitals with special emphasis placed on the role of the ultrasound department.
01.09 Describe the relationship of the sonographer to the patients and their special needs.

02.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF ULTRASOUND PHYSICS, EMPHASIZING PRACTICAL RELATIONSHIPS OF PHYSICS TO PROPER DIAGNOSIS -- The student will be able to:

02.01 Explain what sound is and its characteristics.
02.02 Compare the difference between pulsed and continuous wave sound.
02.03 Explain amplitude and intensity of sound as it applies to the field of ultrasound.
02.04 Describe the causes and effects of attenuation and impedance on ultrasound.
02.05 Identify the causes and effects of incidence, scattering and refraction of ultrasound.
02.06 Explain the Doppler effect and its use in medicine.
02.07 Describe the factors of attenuation versus depth penetration of ultrasound in human tissue.
02.08 Identify resolution and controlling factors of resolution as applied to the field of ultrasound.

03.0 DEMONSTRATE AN AWARENESS OF ULTRASOUND PHYSICS BY EXPLORING THE VARIOUS ASPECTS OF THE FIELD THROUGH INDIVIDUAL EXPERIMENTATION -- The student will be able to:

03.01 Discuss and demonstrate the basic principles governing sound and sound interaction in various types of tissue.
03.02 Describe and demonstrate the conditions affecting sound transmission such as the attenuation factors.
03.03 Relate mathematical formulas to the action of sound at interfaces of various qualities.
03.04 Describe resolution and its effect on the final image.
03.05 Describe and demonstrate the factors that control and determine both axial and lateral resolution.

04.0 APPLY KNOWLEDGE OF THE ANATOMY AND SCANNING TECHNIQUES RELATED TO THE UPPER ABDOMINAL ORGANS AND SYSTEMS -- The student will be able to:

04.01 Draw and label the gross upper abdominal organs in both longitudinal and transverse dimensions.
04.02 Identify the gross upper abdominal anatomy as demonstrated by

sonography, and common anatomic drawings.

04.03 Explain the physiology of the upper abdominal organs and the related lab examinations.
04.04 Explain the normal preparations for the sonographic demonstration of the upper abdominal organs.
04.05 Explain the protocol for (actual) scanning sonographically the upper abdominal organs.
04.06 Explain the common pathology related to the upper abdomen and correlate with special scanning techniques.
04.07 Demonstrate the normal anatomy of the upper abdomen with a real-time device.
04.08 Explain the various types of equipment and their selection in performing an ultrasound exam.
04.09 Explain and use the various techniques of instrumentation required to create a diagnostic sonogram.
04.10 Explain and use the methods of patient preparation and care before and during a sonogram.
04.11 Present a sonographic exam in completed form.
04.12 Perform a complete ultrasound examination of the upper abdomen with little if any assistance (from patient preparation to final reading).
04.13 Demonstrate skills to develop and maintain the special relationship of the sonographer to the patient and to other persons in medicine.
04.14 Demonstrate laboratory safety techniques as related to sonographic imaging units in the patient examination situation.
04.15 Use basic techniques for orientation and labeling of sonographic images.
04.16 Describe the preparations and over-all procedures for a typical ultrasound examination of the upper abdomen.
04.17 Identify gross abdominal structures as demonstrated by ultrasound such as the liver, gall bladder, aorta, inferior vena cava, stomach, pancreas, bowel and spleen.

05.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF INSTRUMENTATION COMMON TO THE FIELD OF ULTRASOUND -- The student will be able to:

05.01 Describe piezoelectric effects.
05.02 Describe both static and real-time transducer construction.
05.03 Discuss historical perspective of scanner development.
05.04 Explain and describe signal processing how it effects image presentations.
05.05 Discuss basic unit construction in the form of block diagrams static, real-time and Doppler.
05.06 Describe the purpose and use of typical controls located on static, real-time and Doppler ultrasound scanners.
05.07 Identify methods of determining and assuring quality control both sonographically and photographically.
05.08 Demonstrate communication skills required on a daily basis in the typical sonography setting.
05.09 Discuss causes, detection and control of factors that may create biologic effects in human tissue with insonation at the diagnostic medical exposure level.

06.0 APPLY KNOWLEDGE GAINED IN INSTRUMENTATION LECTURE AND WORK WITH ACTUAL ULTRASOUND SCANNERS SIMILAR TO THOSE FOUND IN LOCAL HOSPITALS -- The student will be able to:

06.01 Develop and use patient information systems and impressions.
06.02 Explain the various types of transducers available on the market, their construction and selection for sonographic imaging.
06.03 Explain and use amplification in all its forms to produce a diagnostic quality sonogram.
06.04 Explain and use power to produce a diagnostic quality sonogram.
06.05 Explain and use the various forms of processing to produce a diagnostic quality sonogram.
06.06 Explain and use the various types of scanning movements required

to produce diagnostic quality sonograms.
06.07 To explain and recognize typical artifacts as found in sonographic imaging and photography.
06.08 Explain and use a test object.

07.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTETRICS AND GYNECOLOGY -- The student will be able to:

07.01 Describe the basic stages of embryology and sonographic relationships.
07.02 Describe events occurring in the first trimester and their relationship to ultrasound.
07.03 Discuss anatomy, physiology and pathology of the various stages of fetal development as related to ultrasound.
07.04 Discuss anatomy, physiology and pathology of the placenta at all stages of development.
07.05 Describe methods for determining gestational and fetal growth by ultrasound and physical examination methods.
07.06 Identify specific diseases common to the gestational period.
07.07 Describe normal anatomy of the female pelvis and its relationship to ultrasound.
07.08 Explain sonographic evaluation of the female pelvis in the pathologic state.
07.09 Discuss anatomy, physiology and pathology of the female reproductive organs.

08.0 APPLY KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTETRICS AND GYNECOLOGY -- The student will be able to:

08.01 Compare normal and abnormal states of embryology in the human as demonstrated by ultrasound.
08.02 Explain the normal anatomy of the pregnant uterus and dating techniques of the fetus and placenta.
08.03 Compare the normal and pathologic appearance of the fetus.
08.04 Demonstrate special techniques of ultrasound scanning and collateral processes during pregnancy.
08.05 Describe the normal anatomy and scanning techniques used to demonstrate the female and male pelvis.
08.06 Describe pathology common to the human pelvis and special techniques for demonstrating sonographically.
08.07 Explain the process used to develop pelvic mass charts and their use.
08.08 Compare the normal and pathologic anatomy of the human renal system to include adrenals.
08.09 Describe the scanning techniques common to sonographic imaging of the renals and the adrenals.

09.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY OF THE GENITOURINARY SYSTEM -- The student will be able to:

09.01 Identify anatomy of renals.
09.02 Describe physiology of renals.
09.03 Discuss pathology of renals.
09.04 Explain scanning techniques of renals.
09.05 Discuss anatomy, physiology, pathology and scanning techniques of adrenals.
09.06 Discuss gross anatomy, pathology and scanning techniques of the ureters, urinary bladder, prostate, testicles.

10.0 DEVELOP A CONTINUOUS AWARENESS OF THE DISEASE PROCESSES -- The student will be able to:

10.01 Discuss basic concepts of the causes of disease.
10.02 Discuss urogenital pathology common to allied health.
10.03 Discuss gastrointestinal diseases.
10.04 Discuss common pathology found in obstetrics and gynocology.
10.05 Discuss common pathology found in the cardiovascular system.
10.06 Discuss common pathology found in the eye and orbit.
10.07 Apply infection control techniques following Center for Disease Control (CDC) guidelines.
10.08 Demonstrate communication skills required to be an effective participant in the health care system.

11.0 APPLY ACCUMULATED KNOWLEDGE TO THE PROCESS OF CREATING DIAGNOSTIC SONOGRAMS -- The student will be able to:

11.01 Complete in all aspects a diagnostic sonogram with emphasis on:
    patient identification
    patient interaction
    general attitude
    creation of sonogram
    safety
    recognition of anatomy, both normal and pathologic.
11.02 Recognize and report symptoms of abuse and neglect.
11.03 Complete routine documentation associated with a typical ultrasound department.
11.04 Recognize legal, ethical and professional responsibilities to patients, physicians and co-workers.

12.0 APPLY SKILLS NEEDED TO COMPLETE DIAGNOSTIC IMAGES OF HIGH QUALITY FROM A VARIETY OF SCANNING UNITS -- The student will be able to:

12.01 Perform complete and diagnostic examinations of the abdomen, pelvis and obstetrical patient using real-time and/or static devices.
12.02 Present completed examinations in detail with justification of all techniques, methods and procedures used to obtain data.
12.03 Identify gross pathology of the abdomen, pelvis and obstetrical patient, both on sonograms and related imaging modalities.
12.04 Perform all preliminary procedures leading to actual examination by sonography and all procedures necessary post examination.
12.05 Demonstrate skills needed to relate with tact and diplomacy with patients, physicians, nurses, other imaging personnel and the general hospital population.
12.06 Demonstrate those characteristics that reflect the high degree of professionalism associated with the field of ultrasound.

13.0 DEMONSTRATE AWARENESS OF THE APPLICATION OF COMPUTERS IN MEDICAL TECHNOLOGY -- The student will be able to:

13.01 Discuss history, types of computers and applications in medicine.
13.02 Discuss word processing and basic programming in BASIC language.
13.03 Create a working program in BASIC language related to their field/interest.
13.04 Demonstrate the use of the micro-computer for word processing.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application properly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate acceptable employee health habits.
14.10 Recognize the need for continuing education to maintain and up-date knowledge and skills.

15.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS

-- The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
15.02 Identify community resources and services available to the victims of immune-deficiency diseases.
15.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
15.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Electrocardiograph Aide

CODE NUMBER: Secondary 8415000 Postsecondary ______

Florida CIP 0317.020301

SECONDARY SCHOOL CREDITS 1 COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____ Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 10-12, 30, 31

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE @7 G
LAB TECH @7 G LAB ASST @7 G
EKG @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as an electrocardiograph aide (32926214) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, communication and interpersonal skills, human anatomy and physiology with emphasis on cardiac and vascular systems, medical terminology and transcription, patient care techniques in the health care facility, medical instrumentation, safe and efficient work practices, CPR, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: The laboratory competencies are achieved through simulated practice using standard equipment and supplies found in electrocardiography departments of health care facilities.

Clinical learning experiences are an integral part of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

01. Demonstrate the ability to use communication and interpersonal skills effectively.
02. Demonstrate knowledge of human anatomy and physiology with emphasis on the cardiovascular system.
03. Interpret, apply and transcribe medical terminology.
04. Perform patient care techniques in the health care facility.
05. Demonstrate knowledge of, apply and use medical instrumentation modalities.
06. Describe cardiovascular drugs, their actions, use and adverse effects.
07. Interpret electrocardiograph rhythms.
08. Identify legal and ethical responsibilities.
09. Demonstrate employability skills.
10. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8415000

PROGRAM TITLE: Electrocardiograph Aide POSTSECONDARY NUMBER: ______

01.0 DEMONSTRATE THE ABILITY TO USE COMMUNICATION AND INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

01.01 Accept and place telephone calls and relay messages.
01.02 Greet and direct professionals and patients.
01.03 Use courtesy, tact, patience and assertiveness techniques.
01.04 Describe different methods of communicating.
01.05 Identify chain of command in an institutional setting.

02.0 DEMONSTRATE KNOWLEDGE OF HUMAN ANATOMY AND PHYSIOLOGY WITH EMPHASIS ON THE CARDIOVASCULAR SYSTEM -- The student will be able to:

02.01 List body systems and identify two (2) functions of each.
02.02 Identify the structure and function of the heart.
02.03 Describe the circulatory system.
02.04 State the purpose of the coronary arteries.

03.0 INTERPRET, APPLY AND TRANSCRIBE MEDICAL TERMINOLOGY -- The student will be able to:

03.01 Identify components of medical terms.
03.02 Define, spell and pronounce medical terms.
03.03 List and define standard abbreviations and medical symbols.
03.04 Type 35 correct words per minute.
03.05 Interpret and transcribe terminology related to cardiovascular testing.

04.0 PERFORM PATIENT CARE TECHNIQUES IN THE HEALTH CARE FACILITY -- The student will be able to:

04.01 Describe the physical and mental preparation of the patient for cardiovascular testing.
04.02 Identify patient and verify the requisition order.
04.03 Prepare patient for cardiovascular diagnostic testing.
04.04 Measure and record patients vital signs.
04.05 Demonstrate isolation techniques.
04.06 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
04.07 Assist with CPR.
04.08 State precautions required when performing diagnostic procedures.
04.09 Recognize and report symptoms of neglect and abuse.
04.10 Perform skills relative to moving, positioning and transporting patients.

05.0 DEMONSTRATE KNOWLEDGE OF, APPLY AND USE MEDICAL INSTRUMENTATION MODALITIES -- The student will be able to:

05.01 Define ECG.
05.02 Calibrate and standardize the cardiograph instrument.
05.03 Identify and place chest and limb leads.
05.04 Identify artifacts and mechanical problems.
05.05 State Einthoven's triangle.
05.06 Perform and assess a 12 lead ECG.
05.07 Describe other modalities of cardiovascular diagnosis and interpretation.
05.08 Identify and respond to cardiac emergency.

06.01 Describe mechanisms by which cardiovascular drugs work.
06.02 List common cardiovascular drugs.
06.03 State actions and adverse effects, of commonly used drugs.
06.04 Differentiate between normal and abnormal ECG changes due to drugs.

07.0 INTERPRET ELECTROCARDIOGRAPH RHYTHMS -- The student will be able to:

07.01 Recognize and describe sinus rhythms.
07.02 Recognize and describe atrial rhythms.
07.03 Recognize and describe AV junctional rhythms.
07.04 Recognize and describe extrasystoles.
07.05 Recognize and describe ventricular rhythms.
07.06 Recognize and describe AV Block.
07.07 List purposes of pacemakers and indications for insertion.

08.0 IDENTIFY LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

08.01 Follow policies and procedures designed to assure confidentiality of health information.
08.02 Maintain a safe and efficient work environment.
08.03 Maintain equipment so it will be safe and accurate.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application properly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate acceptable employee health habits.

10.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
10.02 Identify community resources and services available to the victims of immune-deficiency diseases.
10.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
10.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Electrocardiograph Technology

CODE NUMBER: Secondary ________ Postsecondary H170203

Florida CIP 0317.020300

SECONDARY SCHOOL CREDITS ________ COLLEGE CREDITS ________ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL (S): _____7-9 _____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: NURSING ED @5
LAB TECH @7 G
EKG @7 G
PRAC NURSE @7 G
LAB ASST @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as electrocardiograph technicians (078.362-018), EKG Technicians (32926214), or to provide supplemental training for persons previously or currently employed in this occupation. The content includes, but is not limited to, communication and interpersonal skills, overview of human anatomy and physiology with emphasis on cardiac and vascular systems, medical terminology and transcription, patient care techniques, medical instrumentation, cardiovascular drugs, interpretation of monitoring and testing results, medical ethics, cardiac wellness and rehabilitation, safe and efficient work practices, CPR, Basic Life Support (BLS) and employability skills.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: The laboratory competencies are achieved through simulated practice using standard equipment and supplies found in electrocardiography departments of health care facilities.

Clinical learning experiences are an integral part of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization as well as participation in a career related professional organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 1080 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Discuss human anatomy and physiology.
05. Describe the cardiovascular system.
06. Interpret, apply and transcribe medical terminology.
07. Perform patient care techniques in a health care facility.
08. Use medical instrument modalities.
09. Describe cardiovascular drugs, their actions, use, and adverse effects.
10. Interpret monitoring and testing results.
11. Demonstrate legal and ethical behavior.
12. Describe and demonstrate cardiac wellness and rehabilitation.
13. Use communication and interpersonal skills effectively.
14. Demonstrate employability skills.
15. Apply accepted principles of infection control.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ________

PROGRAM TITLE: Electrocardiograph Technology POSTSECONDARY NUMBER: H170203

01.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

01.01 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
01.02 Distinguish between factual reports and personal opinion.
01.03 Report observations in written and oral form.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 DISCUSS HUMAN ANATOMY AND PHYSIOLOGY -- The student will be able to:

04.01 Identify functions of the human cell and state its relationship to body function.
04.02 Diagram and label a cell.
04.03 Identify and describe body planes.
04.04 Identify and describe body systems and their functions.

05.0 DESCRIBE THE CARDIOVASCULAR SYSTEM -- The student will be able to:

05.01 Locate the heart and surrounding structures.
05.02 Diagram and label the parts of the heart and list the functions of each of labeled part.
05.03 Trace the flow of blood through the cardiopulmonary system.
05.04 Identify and describe the electrical conduction system.

06.0 INTERPRET, APPLY AND TRANSCRIBE MEDICAL TERMINOLOGY -- The student will be able to:

06.01 Identify components of medical terms.
06.02 Pronounce, spell and define medical terms.
06.03 List and define standard abbreviations and medical symbols.
06.04 Interpret and transcribe terminology related to cardiovascular testing.

07.0 PERFORM PATIENT CARE TECHNIQUES IN A HEALTH CARE FACILITY -- The student will be able to:

07.01 Perform cardiopulmonary resuscitation (CPR).
07.02 Identify fire and safety rules and regulations.
07.03 Prepare the patient physically and mentally for cardiovascular testing.
07.04 State identification methods and precautions required when performing diagnostic procedures.

07.05 Perform skills relative to moving, positioning, and transporting patients.
07.06 Measure and record patient's vital signs.
07.07 Recognize and report symptoms of neglect and abuse.
07.08 Demonstrate isolation techniques.

08.0 USE MEDICAL INSTRUMENT MODALITIES -- The student will be able to:

08.01 Calibrate and standardize the cardiograph instrument.
08.02 Identify three types of lead systems.
08.03 Demonstrate proper lead placement.
08.04 Identify artifacts and mechanical problems.
08.05 Perform a 12 lead ECG.
08.06 Describe the Holter monitoring and scanning exercise treatment.
08.07 Describe other modalities of cardiovascular diagnosis and interpretation.
08.08 Identify and respond to cardiac emergency.

09.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE AND ADVERSE EFFECTS -- The student will be able to:

09.01 Describe mechanisms by which cardiovascular drugs work.
09.02 List common cardiovascular drugs.
09.03 State actions and adverse effects of commonly used drugs.
09.04 Differentiate between normal and abnormal ECG changes due to drugs.

10.0 INTERPRET MONITORING AND TESTING RESULTS -- The student will be able to:

10.01 Interpret and measure waves, segments, complexes, rates and intervals.
10.02 Identify electrical axis.
10.03 Recognize and interpret sinus rhythms.
10.04 Recognize and interpret atrial rhythms.
10.05 Recognize and interpret atrio-ventricular rhythms.
10.06 Recognize and interpret ventricular rhythms.
10.07 Recognize and interpret types of heart blocks.
10.08 Recognize and interpret pacemaker rhythms.
10.09 Recognize and interpret types of myocardial ischemia and infarction.
10.10 Recognize and interpret atrial and ventricular hypertrophies.
10.11 Recognize and interpret extrasystoles and other rare phenomena.
10.12 Interpret 12 lead ECG results.

11.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIOR -- The student will be able to:

11.01 Follow policies and procedures designed to assure confidentiality of health information.
11.02 Maintain a safe and efficient work environment.
11.03 Maintain equipment so it will be safe and accurate.

12.0 DESCRIBE AND DEMONSTRATE CARDIAC WELLNESS AND REHABILITATION -- The student will be able to:

12.01 Identify predisposing factors to heart disease.
12.02 Describe the American Heart Association diet.
12.03 Explain behavior modification and stress management.
12.04 Describe principles of physical fitness and exercise.
12.05 Perform physical exercise and demonstrate physical fitness.

13.0 USE COMMUNICATION AND INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

13.01 Accept, write, and relay telephone calls and verbal messages.
13.02 Communicate with patients, peers, and authority figures using verbal and non-verbal communication skills.
13.03 Identify the factors that influence communication.

STUDENT PERFORMANCE STANDARDS   EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations   SECONDARY NUMBER: ________

PROGRAM TITLE: Electrocardiograph Technology   POSTSECONDARY NUMBER: H170203

01.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

01.01 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
01.02 Distinguish between factual reports and personal opinion.
01.03 Report observations in written and oral form.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 DISCUSS HUMAN ANATOMY AND PHYSIOLOGY -- The student will be able to:

04.01 Identify functions of the human cell and state its relationship to body function.
04.02 Diagram and label a cell.
04.03 Identify and describe body planes.
04.04 Identify and describe body systems and their functions.

05.0 DESCRIBE THE CARDIOVASCULAR SYSTEM -- The student will be able to:

05.01 Locate the heart and surrounding structures.
05.02 Diagram and label the parts of the heart and list the functions of each of labeled part.
05.03 Trace the flow of blood through the cardiopulmonary system.
05.04 Identify and describe the electrical conduction system.

06.0 INTERPRET, APPLY AND TRANSCRIBE MEDICAL TERMINOLOGY -- The student will be able to:

06.01 Identify components of medical terms.
06.02 Pronounce, spell and define medical terms.
06.03 List and define standard abbreviations and medical symbols.
06.04 Interpret and transcribe terminology related to cardiovascular testing.

07.0 PERFORM PATIENT CARE TECHNIQUES IN A HEALTH CARE FACILITY -- The student will be able to:

07.01 Perform cardiopulmonary resuscitation (CPR).
07.02 Identify fire and safety rules and regulations.
07.03 Prepare the patient physically and mentally for cardiovascular testing.
07.04 State identification methods and precautions required when performing diagnostic procedures.

07.05 Perform skills relative to moving, positioning, and transporting patients.
07.06 Measure and record patient's vital signs.
07.07 Recognize and report symptoms of neglect and abuse.
07.08 Demonstrate isolation techniques.

08.0 USE MEDICAL INSTRUMENT MODALITIES -- The student will be able to:

08.01 Calibrate and standardize the cardiograph instrument.
08.02 Identify three types of lead systems.
08.03 Demonstrate proper lead placement.
08.04 Identify artifacts and mechanical problems.
08.05 Perform a 12 lead ECG.
08.06 Describe the Holter monitoring and scanning exercise treatment.
08.07 Describe other modalities of cardiovascular diagnosis and interpretation.
08.08 Identify and respond to cardiac emergency.

09.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE AND ADVERSE EFFECTS -- The student will be able to:

09.01 Describe mechanisms by which cardiovascular drugs work.
09.02 List common cardiovascular drugs.
09.03 State actions and adverse effects of commonly used drugs.
09.04 Differentiate between normal and abnormal ECG changes due to drugs.

10.0 INTERPRET MONITORING AND TESTING RESULTS -- The student will be able to:

10.01 Interpret and measure waves, segments, complexes, rates and intervals.
10.02 Identify electrical axis.
10.03 Recognize and interpret sinus rhythms.
10.04 Recognize and interpret atrial rhythms.
10.05 Recognize and interpret atrio-ventricular rhythms.
10.06 Recognize and interpret ventricular rhythms.
10.07 Recognize and interpret types of heart blocks.
10.08 Recognize and interpret pacemaker rhythms.
10.09 Recognize and interpret types of myocardial ischemia and infarction.
10.10 Recognize and interpret atrial and ventricular hypertrophies.
10.11 Recognize and interpret extrasystoles and other rare phenomena.
10.12 Interpret 12 lead ECG results.

11.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIOR -- The student will be able to:

11.01 Follow policies and procedures designed to assure confidentiality of health information.
11.02 Maintain a safe and efficient work environment.
11.03 Maintain equipment so it will be safe and accurate.

12.0 DESCRIBE AND DEMONSTRATE CARDIAC WELLNESS AND REHABILITATION -- The student will be able to:

12.01 Identify predisposing factors to heart disease.
12.02 Describe the American Heart Association diet.
12.03 Explain behavior modification and stress management.
12.04 Describe principles of physical fitness and exercise.
12.05 Perform physical exercise and demonstrate physical fitness.

13.0 USE COMMUNICATION AND INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

13.01 Accept, write, and relay telephone calls and verbal messages.
13.02 Communicate with patients, peers, and authority figures using verbal and non-verbal communication skills.
13.03 Identify the factors that influence communication.

13.04 Use charting and documentation skills.
13.05 Identify organizational structure and chain of command in school and health care facilities.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate how to make job changes appropriately.
14.09 Demonstrate acceptable employee health habits.

15.0 APPLY ACCEPTED PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

15.01 Distinguish fact from fallacy regarding the transmission and treatment of immune-deficiency diseases.
15.02 Identify community resources and services available to the victims of immune deficiency diseases.
15.03 Identify "at-risk" behaviors which promote the spread of AIDS and the public education needed to combat the spread of immune-deficiency diseases.
15.04 Apply infection control techniques following the Center for Disease Control (CDC) guidelines.
15.05 Discuss the legal aspect of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Electroencephalograph Technology

CODE NUMBER: Secondary _______ Postsecondary ______

Florida CIP 0317.020400

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational _____Other ______________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as EEG technicians (32923213), electroencephalographic technologists or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, recording and measurement procedures, EEG patterns, patient safety, communication, medical terminology, ethical and legal considerations, equipment use, care and troubleshooting, neuroanatomy and neurophysiology, effects of medications on tracings, neurology and neuropathology, basic electronics for biomedical instrumentation, patient history taking and neonatal studies, using portable equipment, neurodiagnostic procedures, clinical responses, corticography, laboratory management, interpersonal relationships, employability skills, and health and safety including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities are essential for this program, with clinical experiences accounting for nearly one-half of the required time. Clinical experience must be obtained in accredited institutions with which the school has written contractual agreements, including safe student-teacher ratios. Faculty must be responsible for the selection of activities assigned to students in the clinical setting.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. The American Society of Electroencephalographic Technologists, Inc., also has student membership available.

The program should be approved by the Committee on Allied Health Education and Accreditation (CAHEA). Program graduates should be eligible to take the registry examination of the American Board of Registration of Electroencephalographic Technologists for designation as R. EEG T..

The typical length of this program for the average achieving student is an associate degree.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

01. Manage and brief patients.
02. Take and abstract patient histories.
03. Apply recording electrodes.
04. Operate EEG equipment.
05. Perform personal, patient, and equipment electrical safety procedures.
06. Select and perform patient-specific EEG techniques.
07. Recognize and categorize the EEG activity displayed.
08. Recognize, identify and/or correct artifacts.
09. Manage medical emergencies.
10. Correct instrument faults.
11. Debrief patients.
12. Demonstrate knowledge of cortical and depth recording procedures.
13. Demonstrate knowledge and ability to perform electrocerebral silence recording.
14. Prepare descriptive reports of recordings for the use of the electroencephalographer.
15. Manage the laboratory.
16. Keep laboratory records.
17. Schedule appointments.
18. Order supplies.
19. Supervise technicians.
20. Demonstrate employability skills.
21. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Electroencephalograph Technology POSTSECONDARY NUMBER: 0317.020400

01.0 MANAGE AND BRIEF PATIENTS -- The student will be able to:

01.01 Explain EEG procedure to patient.
01.02 Provide attendant nursing skills for handling severly ill patients and apply emergency procedures.
01.03 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
01.04 Observe patient for stability or changes in respiration, circulation, color, skin moisture, and consciousness level.
01.05 Recognize and report symptoms of abuse and neglect.
01.06 Demonstrate social skills and attitudes appropriate to employment in a health care facility.
01.07 Display respect for patients regardless of race, religion, color, creed, sex, age, or diagnosis.
01.08 Display a professional and positive attitude in dealing with patients.
01.09 Maintain confidentiality of all patient records and information.
01.10 Discuss with the patient only that information already known by the patient.
01.11 Discuss the patients condition only when out of audible range of the patient/family and only with appropriate supervisors.

02.0 TAKE AND ABSTRACT PATIENT HISTORIES -- The student will be able to:

02.01 Introduce self to patient, identify patient.
02.02 Explain necessity for obtaining information to patient to elicit patient's cooperation within the limits of his/her physical and mental status.
02.03 Review chart for physicians orders, admission notes, test results, surgical procedures, nurses notes, physical examination, progress notes and medications administered.
02.04 Question patient for chief complaint, description and sequence of symptoms, past history, family history and note any physical defects.
02.05 List all medications and pertinent information in appropriate places.
02.06 Observe patient and note behavior.
02.07 Abstract the data obtained above.

03.0 APPLY RECORDING ELECTRODES -- The student will be able to:

03.01 Perform head measurements.
03.02 Apply electrodes according to the specifications of International 10-20 Electrode placement.
03.03 Describe electrode application, montages, and protocol for neonate recordings and electrocerebral silence study.
03.04 Apply non cerebral monitors for EKG - EOG - EMG and/or reference recording.
03.05 Describe and perform various methods of applications such as electrode paste, collodian, and needle electrode insertion.

04.0 OPERATE EEG EQUIPMENT -- The student will be able to:

04.01 Calibrate the EEG instrument in preparation for a procedure by aligning the time axis on one grid, measuring the pen deflection at 7mm, listing the electrode impedances under 5 kiloohms, and selecting the Bio Cal montage, labeling the parameters of sensitivity, high linear frequency control and low linear frequency control.

04.02 Calibrate the impedance meter.
04.03 Adjust and identify instrumentation settings used during the recording of electrocerebral potentials.
04.04 Evaluate adequate functioning of equipment and identify different features of various commercial EEG instrumentation.
04.05 Adjust and identify instrumentation settings used during the recording of electrocerebral potentials: HLF, LLF, 60Hz, sensitivity, fast and slow paper speeds.
04.06 Select and label routine montages by memory.
04.07 Make specific adjustments of calibration and impedances.
04.08 Note behavior of patient on EEG: position, consciousness level, movement, clinical correlation.
04.09 Draw and describe frequency response curves and the EEG convention of polarity.

05.0 PERFORM PERSONAL, PATIENT, AND EQUIPMENT ELECTRICAL SAFETY PROCEDURES

-- The student will be able to:

05.01 Direct the activities of the patient, insuring safety and comfort while maintaining a controlled environment.
05.02 Protect equipment from harm due to cardiac defibrillation procedures, etc.
05.03 Protect self as directed in many situations avoiding contact with live electrical wires or outlets, wear protective gear.

06.0 SELECT AND APPLY PATIENT SPECIFIC EEG TECHNIQUES

--The student will be able to:

06.01 Identify and describe invasive and non-invasive neurological diagnostic procedures.
06.02 Describe the criteria and procedure for insertion of naso-pharyngeals and assist with sphenoidals.
06.03 Perform photic stimulation and describe/recognize photic evoked response, photomyoclomus and photo convulsive response.
06.04 Monitor hyperventilation and post hyperventilation, then notate accumulating 10 second intervals as pluses during hyperventilation and minuses for post hyperventilation. Describe hyperventilation findings and contraindications.
06.05 Determine polarity of cerebral potentials and eye movements.
06.06 Select or design montages to determine electrical field distribution of generalized and/or localized EEG abnormalities.
06.07 Recognize the diagnostic limitations of special related procedures and the criteria for their selection.
06.08 Calculate dosage and administer oral medication under minimal supervision.
06.09 Perform noxious stimulation of the patient with decreased consciousness when indicated with assistance as available.
06.10 Perform a neonatal recording and a nasopharyngeal recording.

07.0 RECOGNIZE AND CATEGORIZE THE EEG ACTIVITY DISPLAYED

--The student will be able to:

07.01 Identify normal activity in adults and variants of age correlates.
07.02 Describe/recognize five stages of sleep: I, II, III, IV, and REM.
07.03 Identify sedatives, tranquilizers, anticonvulsants, and medications for activation procedures that correlate with EEG changes.
07.04 Recognize abnormal electrocerebral potentials and interpret significance during recording procedure.
07.05 Recognize abnormal electrocerebral potential: focal, paroxysmal, lateralized, and generalized.
07.06 Recognize and categorize normal and abnormal EEG patterns and artifacts and correlate these phenomena with the patient's neurological examination and diagnosis and environment, respectively.

07.07 Review, describe, and critique tracings with clinical supervisor, EEG instructor and electroencephalographer.
07.08 Prepare a descriptive analysis of the EEG tracing.
07.09 Identify space occupying lesions and gross neuropathology and discuss EEG pattern correlation.

08.0 RECOGNIZE, IDENTIFY AND/OR CORRECT ARTIFACTS -- The student will be able to:

08.01 Recognize, monitor and/or eliminate all physiological artifacts such as EKG, EMG, EOG, pulse and sweat.
08.02 Recognize and elimate instrumental artifacts such as pops and 60Hz, and equipment malfunction.
08.03 Recognize, eliminate and/or monitor external environmental artifacts such as electostatic interference.

09.0 MANAGE MEDICAL EMERGENCIES -- The student will be able to:

09.01 Assist with CPR/emergency codes as directed.
09.02 Perform restraining techniques on a patient who presents a danger to self or others as directed.
09.03 Report immediately any changes in patient's level of consciousness, respiration, circulation, or color.

10.0 CORRECT INSTRUMENT FAULTS -- The student will be able to:

10.01 Report any malfunctioning equipment.
10.02 Perform routine care/maintenance on equipment.
10.03 Troubleshoot, identify and correct malfunctions as described in the equipment manual.

11.0 DEBRIEF PATIENTS -- The student will be able to:

11.01 Make certain that the patient has been informed about the activity/procedure performed.
11.02 Protect/return all personal items belonging to patient that were removed in the lab (e.g., glasses, dentures, earrings, wig, toupee, barrettes) and make certain that the patient has been informed.
11.03 Insure patient safety by using bed rails, wheel locks and safety belts.

12.0 DEMONSTRATE KNOWLEDGE OF CORTICAL AND DEPTH RECORDING PROCEDURES -- The student will be able to:

12.01 Design montages to determine electrical field distribution of generalized and/or localized EEG abnormalities.
12.02 State the criteria for corticography and describe the EEG technologist's role during surgery.
12.03 Describe the mechanism of neuronal function, synaptic transmission, volume conduction, cortico-thalmic projection system and neuronal basis of electrocerebral potential.

13.0 DEMONSTRATE KNOWLEDGE AND ABILITY FOR ELECTROCEREBRAL SILENCE RECORDING -- The student will be able to:

13.01 List the criteria for minimal technical standards of an electrocerebral silence (ECS) recording.
13.02 Perform an ECS recording.
13.03 Describe the three types of clinical evoked potentials and diagnostic function.

14.0 PREPARE DESCRIPTIVE REPORTS OF RECORDINGS FOR THE USE OF THE ELECTROENCEPHALOGRAPHER -- The student will be able to:

14.01 Communicate effectively/appropriately with department personnel, hospital staff and physicians.

14.02 Design visual aids and compile educational materials for reference.
14.03 Prepare report of each recording.
14.04 Mount tracings with descriptives records.
14.05 Record all information accurately.
14.06 Discuss patient information only with other appropriate medical personnel.
14.07 Display patient anonymity when preparing visual aids.

15.0 MANAGE THE LABORATORY -- The student will be able to:

15.01 Process billing/computer.
15.02 Identify and refer to procedure manual.
15.03 Process reports for patient charts.
15.04 Clean, maintain, and stock the instrument, linen supply, pedigo cart, and cabinets of the EEG laboratory every day.
15.05 Sanitize all parts of equipment utilized: electrodes, stethoscope ear pieces - etc.
15.06 Develop and monitor infection control policies.
16.07 Obtain new equipment/repairs as needed.

16.0 KEEP LABORATORY RECORDS -- The student will be able to:

16.01 File records.
16.02 Prepare daily lab activity records.
16.03 Monitor DRG records.
16.04 File maintenance reports and records of equipment inspections.

17.0 SCHEDULE APPOINTMENTS -- The student will be able to:

17.01 Schedule patient appointments according to agency policies and patient requirements.
17.02 Recognize urgency of requests for services and respond appropriately.
17.03 Respond to STATS.

18.0 ORDER SUPPLIES -- The student will be able to:

18.01 Prepare and update inventory.
18.02 Assess needs and monitor supplies.
18.03 Prepare requisition, being mindful of product deterioration, storage space, and institutional policies.

19.0 SUPERVISE TECHNICIANS -- The student will be able to:

19.01 Monitor infection control procedures/records.
19.02 Prepare incident reports.
19.03 Make assignments, follow through.
19.04 Perform employee evaluations.
19.05 Advise employees.
19.06 Monitor waste/loss of supplies.

20.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

20.01 Conduct a job search.
20.02 Secure information about a job.
20.03 Identify documents that may be required when applying for a job.
20.04 Complete a job application properly.
20.05 Demonstrate competence in job interview techniques.
20.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
20.07 Identify acceptable work habits.
20.08 Demonstrate knowledge of how to make job changes appropriately.
20.09 Demonstrate acceptable employee health habits.

21.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

21.01 Distinguish between fact and fallacy about the transmission of immune-deficiency diseases.
21.02 Identify community resources and services available to the victims of immune-deficiency diseases.
21.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
21.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
21.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Emergency Medical Services - Associate Degree

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.020601

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational ______ Other ______

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: Through the use of common core courses and the addition of several optional courses, this program is designed to prepare students for employment in the following occupational areas:

Management Option: EMS Coordinator (079.117-010), EMS Supervisor, EMS Shift Supervisor, Operations Manager, EMS Manager, or Director of EMS Services.

Education Option: Field Training Officer, Inservice Training Officer, or EMS Instructor, or to provide supplemental training for persons previously or currently employed in these occupations. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services; and the curriculum must adhere to the U.S. Department of Transportation National Standard Curriculum.

The content includes, but is not limited to, the advanced recognition, assessment and advanced management of medical, trauma, psychological and behavioral and obstetrical emergencies under the direction of a physician, anatomy and physiology, medical-legal aspects, medical terminology, intravenous access, pharmacology, advanced airway management, medication administration, defibrillation and cardioversion, and cardiac arrhythmias.

The management option content also includes leadership, motivation and business management skills, communication, stress reduction and management, employee interview and personnel skills, employee retention, business law, and labor relations.

The program shall also include general education courses in english, oral communications, mathematics, natural sciences, and social sciences as currently required for degree programs by the Southern Association of Colleges and Schools (SACS).

II. LABORATORY ACTIVITIES: Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor with a student-teacher ratio not to exceed 6:1.

III. CLINICAL ACTIVITIES: The Joint Review Committee on Educational Programs for the EMT-Paramedic requires supervised clinical experience during which time the student-teacher ratio shall not exceed 6:1.

Management practicum shall be provided in an agency which will provide the student with the opportunity to observe and practice the learning objectives.

IV. SPECIAL NOTE: An appropriate student organization for providing the development of professionalism and leadership skills should be provided. These organizations may include Health Occupations Students of America, Inc. (HOSA), or an organization of the schools choice. This suggestion was made in light of the nature of EMT and Paramedic students which includes the adult learner already involved in unions and EMS professional groups as well as the newly graduated high school senior. Emergency Medical Technician (EMT) certification is required for admittance into the program.

In accordance with State Board of Education rule 6A-10.0315, minimum basic skill levels have been established for admittance into a college associate degree program.

Intended outcomes from 1-31 include all the outcomes for the paramedic program (0317.020600). The medical procedures performed by a Paramedicmust be performed under the direction of a licensed physician with appropriate emergency experience according to Chapter 10D-66, Florida administrative Code.

The receiving institution must grant the same number of credits to entering paramedic as those granted to their own native students.

NOTE: When the word demonstrate is used in a standard, it shall require that actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

The Student Performance Standards shall include, but not be limited to, all those objectives identified in the current U.S. Department of Transportation, National Standard Curriculum for the EMT-Paramedic, Instructor Lesson Plans.

The typical length of this program for the average achieving student is an associate degree.

V. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of the paramedic profession.
02. Describe EMS systems.
03. Describe medical/legal considerations.
04. Describe and demonstrate EMS communications systems.
05. Demonstrate rescue techniques and extrication.
06. Describe major incident response.
07. Describe and manage causes of stress.
08. Use medical terms.
09. Demonstrate general patient assessment and initial management.
10. Manage airway and ventilation.
11. Assess and manage shock.
12. Demonstrate knowledge of pharmacology and administer medications.
13. Assess and manage trauma emergencies.
14. Assess and manage burn injuries.
15. Assess and manage respiratory emergencies.
16. Assess and manage cardiovascular emergencies.
17. Assess and manage endocrine emergencies.
18. Assess and manage neurological emergencies.
19. Assess and manage digestive, genitourinary, and reproductive emergencies.
20. Assess and manage anaphylaxis emergencies.
21. Assess and manage toxicological, alcohol, and drug abuse emergencies.
22. Assess and manage infectious diseases.
23. Assess and manage environmental injuries.
24. Assess and manage geriatric emergencies.
25. Assess and manage pediatric emergencies.
26. Assess and manage the gynecologic patient.

27. Assess and manage the obstetric patient.
28. Assess and manage the neonate.
29. Assess and manage behavioral emergencies.
30. Demonstrate employability skills.
31. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

MANAGEMENT OPTION:

32. Demonstrate leadership and administrative skills basic to management emergency medical service systems.
33. Interpret federal, state and local laws as they apply to emergency medical service systems.
34. Demonstrate knowledge of operational and organizational structures of emergency medical service systems.
35. Demonstrate knowledge of psychological problems and stressors in emergency medical service employees and find appropriate solutions.
36. Demonstrate knowledge of materials and supplies used in emergency medical service systems.
37. Demonstrate knowledge of occupational safety and health.
38. Demonstrate knowledge of appropriate workloads for each employee.
39. Review, approve and monitor departmental capital and operational budgets.
40. Identify and apply legal reimbursement systems.
41. Comply with accreditation standards of governmental or governmental-appointed agencies and organizations.
42. Demonstrate computer literacy.

EDUCATION OPTION:

32. Demonstrate proficiency in communication skills.
33. Demonstrate knowledge of basic teaching methods, learning and educational psychology.
34. Describe and discuss curriculum design and development.
35. Demonstrate appropriate measurement and evaluation skills.
36. Demonstrate mastery of required technical skills.
37. Demonstrate classroom management skills.
38. Demonstrate computer literacy.

STUDENT PERFORMANCE STANDARDS　　EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations　　SECONDARY NUMBER: ______

PROGRAM TITLE: Emergency Medical Services - Associate Degree　　POSTSECONDARY NUMBER: 0317.020601

01.0 DEMONSTRATE KNOWLEDGE OF THE PARAMEDIC PROFESSION -- The student will be able to:

01.01 Define the role and responsibilities of the paramedic.
01.02 Describe and contrast the differences between the various levels of training, from EMT to Paramedic.
01.03 Describe ethics, professionalism, and health care professional.
01.04 Identify whether a particular activity is ethical/unethical, legal/illegal and professional/unprofessional in specific patient care situations.
01.05 List current state requirements for paramedic certification and recertification.
01.06 Define continuing education, certification, licensure and registration.
01.07 Discuss Chapter 401, Florida Statutes, and Chapter 10D-66, Florida Administrative Code.
01.08 State the major purposes of a national association, a national registry, and professional journals.
01.09 State the benefits of paramedics teaching in their community.

02.0 DESCRIBE EMS SYSTEMS -- The student will be able to:

02.01 Define and describe Medical Control and physician responsibility,
02.02 Discuss pre-hospital stabilization of patients.
02.03 Discuss the general differences between management of trauma and medical patients.
02.04 Define and discuss protocols and their development.
02.05 Describe the relationship between prehospital care and total patient care including the emergency department, and hospital specialty departments.
02.06 Describe the continuum of patient care and the responsibilities of the paramedic within the transfer of patient responsibility.
02.07 Discuss the development, implementation, and control of an EMS system.
02.08 Discuss response of the EMS system including system access, dispatcher responsibilities, patient evaluation, medical command, and patient responsibility.
02.09 Discuss promulgation of national standards such as KKK ambulance standards, and involvement of groups such as ASTM, NCSEMSTC, American College of Surgeons, American Medical Association Joint Review Committee, and the U.S. Dpeartment of Transportation.
02.10 Discuss the various paramedic-physician relationships.
02.11 Describe retrospective evaluation of patient care including run report review, continuing education, skill practice, and skill deterioration.
02.12 Discuss the EMT-P's initial responsibilities when arriving on the scene.

03.0 DESCRIBE MEDICAL/LEGAL CONSIDERATIONS -- The student will be able to:

03.01 Discuss the scope and significance of current national and Florida laws and administrative rules relating to the paramedic.
03.02 Discuss medical-legal concepts relating to the paramedic.
03.03 Discuss the need for accurate medical documentation and recordkeeping.
03.04 Discuss the extent to which force and restraint may be used to protect the patient, the Paramedic, and third parties.

03.05 Identify those circumstances that require the Paramedic to report incidents to law enforcement and/or other appropriate authorities.

04.0 DESCRIBE AND DEMONSTRATE EMS COMMUNICATIONS SYSTEMS
-- The student will be able to:

04.01 Describe the phases of communication necessary to complete a typical EMS event.
04.02 Define and describe essential communication terms and equipment.
04.03 Describe various EMS communication systems and the advantages and disadvantages of each.
04.04 Describe factors affecting interference, range and clarity of base, vehicle and portable radio communications.
04.05 Describe the functions and responsibilities of the F.C.C.
04.06 Describe the functions and responsibilities of the EMS dispatcher.
04.07 Describe purposes and methods of verbal communication of patient information to the hospital and to the physician.
04.08 Organize a patient presentation in the proper order for radio transmission to the physician.
04.09 Describe the importance of written medical protocols and the written EMS run report.
04.10 Demonstrate the proper use of portable and mobile transmitter/receivers in a real or simulated patient situation.
04.11 Discuss uses of biotelemetry equipment.
04.12 Complete a written EMS report based on a real or simulated patient situation.

05.0 DEMONSTRATE RESCUE TECHNIQUES AND EXTRICATION
-- The student will be able to:

05.01 Identify possible hazards when given a description of a scene and describe the procedures for handling the hazards.
05.02 Identify and/or describe the equipment used and the techniques necessary for gaining access to, packaging, extricating and transporting patients trapped within a vehicle or other confinement.
05.03 Describe the integration of patient care into the process of patient disentanglement and rescue.
05.04 Identify proper response in the presence of hazardous materials and name proper hazardous materials authorities that should be notified.
05.05 Manage scene and safe patient access.
05.06 Discuss removal and transport of the patient from the scene.
05.07 Demonstrate the procedures and operation of equipment used for gaining access to, packaging, extricating, and transporting patients trapped or confined in a vehicle or other type of entrapment.
05.08 Demonstrate techniques for lifting and handling patients with and without spine injuries and/or other special injury problems utilizing the specialized equipment found on a rescue vehicle.
05.09 Demonstrate techniques for lifting and moving patients utilizing typical patient handling/carrying devices.

06.0 DESCRIBE MAJOR INCIDENT RESPONSE
-- The student will be able to:

06.01 Define mass casualty incident (MCI) and when it should be declared.
06.02 Describe the "pre-planning phase" and "response planning".
06.03 Discuss MCI communications.
06.04 Describe the components of special resources.
06.05 Describe the function of "scene command", "scene triage", and the "transferring command function".
06.06 Describe section and staging management and a system for patient identification.

06.07 Discuss on-scene medical control.

07.0 DESCRIBE AND MANAGE CAUSES OF STRESS -- The student will be able to:

07.01 Define stress and discuss its causes and phases.
07.02 Describe common physiologic responses to stress, its effects, and typical defense mechanisms.
07.03 Describe factors that determine whether anxiety is a positive or negative response.
07.04 Describe behavior that is a manifestation of stress in patients, patients' families and the paramedic.
07.05 Identify and describe common causes of job-related stress and various techniques of paramedic stress management.
07.06 Describe the stages of the grief process and common needs of the patient, the family and the paramedic in dealing with death and dying.
07.07 Describe common management techniques used by the paramedic when a patient is dead or dying.
07.08 Discuss areas of controversy in prehospital care involving death and dying.

08.0 USE MEDICAL TERMS -- The student will be able to:

08.01 Define and use relevant medical terms.
08.02 Identify and use common anatomical medical terms.
08.03 Identify and use medical abbreviations.
08.04 Identify and define common prefixes, suffixes, and word roots.
08.05 Use a medical dictionary.

09.0 DEMONSTRATE GENERAL PATIENT ASSESSMENT AND INITIAL MANAGEMENT -- The student will be able to:

09.01 Establish priorities of care based on threat to life and describe the treatment modalities for the management of these conditions.
09.02 Describe the primary and secondary survey.
09.03 Describe the anatomy, physiology and pathophysiology of the airway and lungs and its anatomical structures.
09.04 Describe the use of adjuncts in airway management.
09.05 Describe advanced methods of airway management.
09.06 Explain the significance of protection of the cervical spine in airway management.
09.07 Explain pulmonary ventilation and gas exchange across the alveolar-cappillary membrane.
09.08 Describe the pathophysiology of open and closed pulmonary injuries.
09.09 Discuss the techniques for evaluating effectiveness of ventilation.
09.10 Describe the anatomy and physiology of the heart and the cardiovascular system.
09.11 Describe the pathophysiology of cardiac arrest.
09.12 Describe the mechanisms of evaluating the effectivensss of perfusion.
09.13 Describe hemorrhage control and its benefits and complications.
09.14 Assess neurological status.
09.15 Discuss the pathophysiology of shock.
09.16 Define the trauma score and its usefulness.
09.17 Demonstrate obtaining a relevant patient medical history.
09.18 Describe how a patient is packaged and stabilized for transportation to the hospital.
09.19 Discuss procedures for hospital selection, the transportation phase, and patient monitoring enroute to the hospital.
09.20 Perform a rapid assessment.
09.21 Perform a secondary survey.
09.22 Demonstrate cardiopulmonary resuscitation.

10.0 MANAGE AIRWAY AND VENTILATION -- The student will be able to:

10.01 Describe and discuss techniques of advanced airway management, to include intubation and surgical procedures.
10.02 Demonstrate methods of airway management on adult, child, and intact manikins both manually and with adjunctive equipment.
10.03 Demonstrate methods for assessing continued adequacy of airway management and ventilation when using advanced airway devices.
10.04 Demonstrate use of portable and fixed suction devices for oropharyngeal and tracheal suctioning.

11.0 ASSESS AND MANAGE SHOCK -- The student will be able to:

11.01 Identify and describe the causes, pathophysiology signs, symptoms, clinical manifestations, and management of shock.
11.02 Describe fluids, fluid transport, and fluid and electrolyte imbalances.
11.03 Discuss resuscitation of the shock patient.
11.04 Discuss the hemodynamics of the cardiovascular system.
11.05 Discuss differences in IV fluid composition and their implications in fluid administration.
11.06 Describe baroreceptors and their affect on blood pressure and perfusion.
11.07 Describe compensated and uncompensated shock.
11.08 Discuss evaluation of the patient's perfusion status.
11.09 Define and discuss acid-base balance.
11.10 Describe indications and contraindications of the pneumatic anti-shock garment.
11.11 Discuss the methods of fluid replacement and the advantages and disadvantages of each.
11.12 Demonstrate, in order of priority, the steps in shock resuscitation.
11.13 Demonstrate the use of the pneumatic anti-shock garment.
11.14 Demonstrate proper technique of setting up intravenous fluids for administration.
11.15 Demonstrate proper technique of peripheral and external jugular venous cannulation on the adult, child and infant patient.
11.16 Demonstrate proper techniques for trouble-shooting an intravenous infusion.
11.17 Calculate fluid administration rates for intravenous fluids utilizing a variety of administration sets.

12.0 DEMONSTRATE KNOWLEDGE OF PHARMACOLOGY AND ADMINISTER MEDICATIONS -- The student will be able to:

12.01 Discuss the various origins and forms of drugs.
12.02 Discuss the various names of a drug (ie. generic, trade, official, chemical).
12.03 Identify those agencies responsible for regulating drugs and the rationale for regulation.
12.04 Demonstrate use of the Physicians Desk Reference.
12.05 Identify local and systemic effects of drugs.
12.06 List and evaluate effects of various factors on the action of drugs.
12.07 Discuss the methods of drug absorption.
12.08 Define and use relevant pharmacology terms.
12.09 Describe and discuss the apothecary and metric systems and convert between and within the systems.
12.10 Describe the various types of drugs and routes of administration.
12.11 Calculate fractional drug dosages.
12.12 State the advantages and disadvantages of subcutaneous, intramuscular, intravenous, and transtracheal injections.
12.13 Demonstrate the proper procedure for intramuscular, subcutaneous, intravenous piggyback, intravenous bolus, and transtracheal medication administration.
12.14 Demonstrate the proper procedure for withdrawing medication from a glass vial and a glass ampule.

13.0 ASSESS AND MANAGE TRAUMA EMERGENCIES -- The student will be able to:

13.01 Describe the general care and transportation of the trauma patient.
13.02 Describe the priorities of trauma care and triage with multiple patients.
13.03 Describe the anatomy, physiology, pathophysiology assessment, and management of trauma to all regions of the human body.
13.04 Describe and demonstrate methods of hemorrhage control.
13.05 Describe neurological examination, assessment, pathophysiology, and management.
13.06 Describe rapid on-scene management of the trauma patient.
13.07 Describe the components of a complete prehospital history and the significance of each.
13.08 Describe various types of splints that are used for immobilization of fractures and dislocations, their use and the advantages and disadvantages of each.
13.09 Describe the short and long backboard, the various state-of-the-art substitutes available, and their specific uses.
13.10 Describe various systems designed for scoring the severity of injuries to the trauma patient and contrast with them with the Florida Trauma Scorecard as identified in Chapter 10D-66, F.A.C.
13.11 Identify and describe the use of a trauma score in quantifying patient condition.
13.12 Demonstrate advanced methods of airway management and ventilation in the trauma patient.
13.13 Demonstrate decompression of a tension pneumothorax.
13.14 Demonstrate application of pneumatic anti-shock garment (MAST).
13.15 Describe and demonstrate physical examination of the trauma patient.
13.16 Demonstrate a neurological examination as performed on the trauma patient.
13.17 Demonstrate immobilization of the cervical spine.
13.18 Demonstrate splinting techniques.

14.0 ASSESS AND MANAGE BURN INJURIES -- The student will be able to:

14.01 Describe the anatomy, physiology, pathophysiology, and assessment of the integumentary system.
14.02 Discuss the movement of body fluids between plasma, interstitial compartments and intracellular compartments.
14.03 Describe the assessment and management of the burn victim.
14.04 Describe the pathophysiology and treatment of burn shock.
14.05 Describe and discuss the major causes, classifications, and categories of burn.
14.06 Describe and discuss the method of calculating percentages of body surface area burned and various formulas for calculating fluid resuscitation.
14.07 Describe the assessment and management of inhalation injury.
14.08 Demonstrate management of the burn victim with and without associated injuries.

15.0 ASSESS AND MANAGE RESPIRATORY EMERGENCIES -- The student will be able to:

15.01 Describe the anatomy and physiology of the respiratory system and define appropriate medical terms.
15.02 Identify the normal partial pressures of oxygen and carbon dioxide in the alveoli, arterial and venous blood, and factors that affect those levels.
15.03 Describe the normal and COPD respiratory drives.
15.04 Identify the pharmacology, actions, indications, precautions, dosages, contraindications, and side effects of typical respiratory drugs for the adult and pediatric patient and demonstrate methods of administration.
15.05 Discuss the signs, symptoms, and pathophysiology of conditions affecting the respiratory system.

15.06 Demonstrate inspection, auscultation and palpation of the thorax.
15.07 Identify normal and abnormal lung sounds.
15.08 Obtain a history and assess patients with respiratory complaints.
15.09 Describe the management of patients with respiratory problems.

16.0 ASSESS AND MANAGE CARDIOVASCULAR EMERGENCIES

-- The student will be able to:

16.01 Describe the anatomy, physiology, and pathophysiology relevant to cardiovascular disease and emergencies.
16.02 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of common emergency cardiovascular drugs (AHA/ACLS).
16.03 Identify complications of intracardiac injections.
16.04 Describe innervation of the heart, sympathetic and parasympathetic stimulation, blockade, and effects on the heart rate.
16.05 Discuss myocardial electrical physiology.
16.06 Describe signs, symptoms, and common chief complaints of patients with cardiac conditions.
16.07 Identify and describe the historical information, specific observations, and physical findings to be evaluated in the cardiac patient.
16.08 Identify actions, uses, and side effects of common prescription drugs relative to cardiac problems.
16.09 Discuss the etiology of cardiac arrest in adults and pediatric patients.
16.10 Discuss concepts of ECG monitoring, types and causes of artifacts, and rhythm analysis format.
16.11 Identify the wave forms, intervals, and normal values relative to an electrocardiogram (ECG).
16.12 Describe a 12-lead ECG and compare to continuous monitoring.
16.13 Describe the etiology, clinical significance, and ECG characteristics of cardiac dysrhythmias.
16.14 Describe the indications for use of a precordial thump, vago tonic maneuvers, synchronized cardioversion, and defibrillation and discuss energy recommendations for adult and pediatric patients.
16.15 Identify wave forms, artifacts, and dysrhythmias on Lead or MCL1 rhythm strips and oscilloscope.
16.16 Obtain history, assess, and manage dysrhythmias or cardiac condtion.
16.17 Demonstrate application of ECG electrodes and obtain a sample Lead II or MCL1 rhythm strip.
16.18 Use defibrillator paddles for Lead II monitoring.
16.19 Troubleshoot a poor ECG rhythm.
16.20 Perform a precordial thump, vago tonic maneuvers, synchronized cardioversion, defibrillation, and external cardiac pacing.
16.21 Use a mechanical CPR device.

17.0 ASSESS AND MANAGE ENDOCRINE EMERGENCIES

-- The student will be able to:

17.01 Identify and describe the anatomy, physiology, pathophysiology of the endocrine system.
17.02 Describe the assessment and management of endocrine emergencies.
17.03 Identify and discuss the significance of the historical information, observations, and physical findings in the patient with endocrine disorders.
17.04 Identify common prescription drugs that a patient with endocrine problems might take and the implications of each.
17.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
17.06 Obtain a history and assess and manage patients with endocrine problems.
17.07 Administer relevant drugs.

18.0 ASSESS AND MANAGE NEUROLOGICAL EMERGENCIES

-- The student will be able to:

18.01 Identify and describe the anatomy, physiology, pathophysiology of the neurological system.

18.02 Describe the assessment and management of neurological disorders.

18.03 Identify the actions, uses and side effects of common prescription drugs relative to neurological problems.

18.04 Identify common prescription drugs that a patient with neurological problems might take and the implications of each.

18.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.

18.06 Describe and use the Glasgow Coma Scale.

18.07 Describe and differentiate various types of seizures and their phases.

18.08 Obtain history and assess patients with neurological disorders.

18.09 Manage patients with neurological emergencies.

19.0 ASSESS AND MANAGE DIGESTIVE, GENITOURINARY, AND REPRODUCTIVE EMERGENCIES

-- The student will be able to:

19.01 Describe the anatomy, physiology, pathophysiology of the digestive, genitourinary and reproductive systems.

19.02 Identify and describe the significance of the historical information, observations, and physical findings in the patient with digetive, genitourinary, and reproductive disorders.

19.03 Describe the assessment and treatment of digestive, genitourinary, and reproductive system disorders.

19.04 Identify common prescription drugs that a patient with digestive, genitourinary, and reproductive problems might take and the implications of each.

19.05 Discuss the basic principles, types, and complications of dialysis.

19.06 Discuss the assessment and management of the dialysis patient, to include vascular access.

19.07 Obtain a history and assess patients with digestive, genitourinary, and reproductive problems.

19.08 Manage patients with digestive, genitourinary, and reproductive emergencies.

20.0 ASSESS AND MANAGE ANAPHYLAXIS EMERGENCIES

-- The student will be able to:

20.01 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of anaphylaxis.

20.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with potential anaphylaxis.

20.03 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects for the adult and pediatric patient for epinephrine, diphenhydramine, aminophylline, and dexamethasone.

20.04 Obtain a history and assess patients with potential anaphylaxis.

20.05 Manage patients with anaphylactic emergencies.

20.06 Administer epinephrine, diphenhydramine, aminophylline, and dexamethasone to the adult and pediatric patient.

21.0 ASSESS AND MANAGE TOXICOLOGY, ALCOHOLISM, AND DRUG ABUSE EMERGENCIES

-- The student will be able to:

21.01 Discuss toxicologic emergencies.

21.02 Identify and discuss the routes of entry of toxic substances into the body.

21.03 Discuss the role of Poison Control Centers in the EMS system and in the management of patients with toxicological emergencies.

21.04 Define abuse terms, identify commonly abused drugs, and describe their effects.

21.05 Describe the anatomy, physiology, pathophysiology assessment and management of patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.

21.06 Discuss the incidence of alcoholism, drug abuse, and substance abuse in the United States.

21.07 obtain a history, assess, and manage patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.

21.08 Administer relevant drugs.

21.09 Apply a constricting band.

22.0 ASSESS AND MANAGE INFECTIOUS DISEASES

-- The student will be able to:

22.01 Define terms and conditions relative to infectious diseases.

22.02 Describe the anatomy, physiology, pathophysiology, causes, mode of transmission, incubation period, assessment and management typical infectious and communicable diseases and parasites.

22.03 Identify and discuss the significance of historical information, observations, and physical findings in the patient with infectious/communicable disease or parasites.

22.04 Practice Universal Precautions according to established standards (CDC).

22.05 Discuss procedures for reporting and follow-up after exposure to a communicable disease, according to established standards.

22.06 Describe methods used to disinfect equipment and vehicles involved with an infectious patient.

22.07 Obtain a history and assess patients with infectious/communicable disease or parasites.

22.08 Manage patients with infectious/communicable disease or parasites.

23.0 ASSESS AND MANAGE ENVIRONMENTAL INJURIES

-- The student will be able to:

23.01 Describe and discuss homeostasis, methods of body temperature regulation and the role and methods of thermoregulation and heat dissipation and retention in pathologic circumstances.

23.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with hypothermic or hyperthermic disorders.

23.03 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of hypothermic or hyperthermic disorders.

23.04 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of near-drowning.

23.05 Identify and discuss the significance of historical information, observations, and physical findings in the patient with a near-drowning emergency.

23.06 State the factors affecting survivability and probability of successful resuscitation in near-drowning patients.

23.07 Identify the common types and sources of ionizing radiation.

23.08 Identify sources of normal background radiation.

23.09 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of acute and/or chronic exposure to ionizing radiation.

23.10 Identify and discuss the significance of historical information, observations, and physical findings in the patient with acute and/or chronic exposure to ionizing radiation.

23.11 Discuss the safety of allied health personnel and patients related to exposure to ionizing radiation.

23.12 Discuss procedures relating to radiological incidents for notification of appropriate health officials.

23.13 List the common medical problems associated with scuba diving accidents.

23.14 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of decompression sickness, overpressure accidents, pneumomediastinum, air embolism, nitrogen narcosis, and subcutaneous emphysema.

23.15 Identify and discuss the significance of historical information, observations, and physical findings in patients with decompression sickness, overpressure accidents, pneumomediastimum, air embolism, nitrogen narcosis, and subcutaneous emphysema, and the significance of each.
23.16 Obtain a history and assess patients with hypothermic and hyperthermic problems.
23.17 Discuss management of patients with hypothermic and hyperthermic complaints.
23.18 Obtain a history and assess patients with exposure to ionizing radiation.
23.19 Discuss management of patients with exposure to ionizing radiation.
23.20 Obtain a history and assess patients with near-drowning emergencies.
23.21 Discuss management of patients with near-drowning emergencies.
23.22 Obtain a history and assess patients with scuba diving emergencies.
23.23 Discuss management of patients with scuba diving emergencies.

24.0 ASSESS AND MANAGE GERIATRIC EMERGENCIES

-- The student will be able to:

24.01 Identify the physical, social and psychological differences between youth and the elderly.
24.02 Identify and discuss the significance of historical information, observations, and physical findings in the geriatric patient with acute and/or chronic medical problems.
24.03 Identify and discuss illness/complaints that require special consideration in the elderly.
24.04 Describe the anatomy, physiology, pathophysiology, assessment and management of common geriatric illnesses.
24.05 Obtain a history and assess geriatric patients.
24.06 Treat geriatric patients.
24.07 Discuss geriatric abuse.
24.08 Discuss the components and objectives of a gerontology program.

25.0 ASSESS AND MANAGE PEDIATRIC EMERGENCIES

-- The student will be able to:

25.01 Identify the general goals of management of the pediatric patient.
25.02 Discuss specific historical information and its sources in evaluating the pediatric patient.
25.03 Discuss by age groups the relevant aspects of normal growth and development, personality development, relatiohship to parents, history factors, common illnesses and accidents.
25.04 Describe Sudden Infant Death Syndrome (SIDS), current theories, assessment and management, and the immediate needs of the family.
25.05 Describe the characteristics of the child abuser and the abused child.
25.06 Discuss the assessment and management of the potentially abused child including important historical information and management of the family in the child abuse situation.
25.07 Recognize and report child abuse.
25.08 Describe the anatomy, physiology, pathophysiology, assessment, and management of common pediatric disorders.
25.09 Identify the pediatric dosage for relevant drugs (AHA/ACLS).
25.10 Discuss and demonstrate techniques for airway maintenance in the pediatric patient.
25.11 Describe and discuss techniques and sites for intravenous infusion in the pediatric patient.
25.12 Obtain history and assess the pediatric patient.

26.0 ASSESS AND MANAGE THE GYNECOLOGIC PATIENT
-- The student will be able to:

26.01 Describe the anatomy and physiology of the female reproductive system.
26.02 Identify and disucss the significance of historical information, observations, and physical findings to be evaluated in the patient's gynecologic problems.
26.03 Describe the pathophysiology and management of gynecological disorders.
26.04 Describe potential causes, assessment and management of trauma to the external genitalia.
26.05 Describe the assessment and management of a sexual assault victim.
26.06 Obtain a history and assess and manage the patient with a gynecologic problem.

27.0 ASSESS AND MANAGE THE OBSTETRIC PATIENT
-- The student will be able to:

27.01 Define obstetrical terminology.
27.02 Describe the process of fetal development and circulation.
27.03 Identify and discuss the significance of historical information, observations, and physical findings in the obstetric patient.
27.04 Identify and describe early signs and symptoms of pregnancy.
27.05 Describe potential causes, assessment, and management of trauma to the pregnant mother and the fetus.
27.06 Discuss the effects of pregnancy on pre-existing medical conditions.
27.07 Describe the anatomy, physiology, pathophysiology, causes, assessment and management of obstetric.
27.08 Describe Braxton-Hicks contractions.
27.09 Discuss the progression of labor.
27.10 Discuss factors that influence transport decisions for the patient in labor.
27.11 Describe a normal cephalic delivery.
27.12 Discuss the pathophysiology, assessment, and management of delivery complications.
27.13 Identify the pharmacology, actions, indications, methods of administration, dosages, contraindications and side effects of oxytocin.
25.14 Obtain a history and assess the obstetric patient.
25.15 Treat obstetrical patients, including assisting with childbirth.
25.16 Administer oxytocin.

28.0 ASSESS AND MANAGE THE NEONATE -- The student will be able to:

28.01 Describe anatomy, physiology, pathophysiology, assessment, and routine management of the neonate.
28.02 Describe the mechanisms and effects, and treatment of hypothermia in the neonate.
28.03 Define the parameters, numerical values utilized, and the procedure for Apgar scoring.
28.04 Describe and demonstrate stimulation of and CPR for the distressed neonate.
28.05 Identify observations and physical findings to be evaluated in the neonate.
28.06 Identify the problems and equipment requirements for transportation of the neonate.
28.07 Obtain a history, assess, and manage the neonate.
28.08 Administer oxygen to the neonate.
28.09 Suction the neonate using DeLee Suction and bulb syringe.
28.10 Calculate Apgar score.

29.0 ASSESS AND MANAGE BEHAVIORAL EMERGENCIES
-- The student will be able to:

29.01 Define behavioral emergency.
29.02 Discuss factors that may alter the emotional status of the ill or injured.
29.03 Discuss reasons and method of reassuring the patient experiencing and emotional crisis.
29.04 Discuss verbal communication techniques useful in managing the emotionally disturbed patient.
29.05 Discuss means to insure the safety of the Paramedic.
29.06 Discuss circumstances when bystanders and relatives should be removed from the scene.
29.07 Discuss factors which increase the risk of suicide and behaviors that are indicators of an impending suicide attempt.
29.08 Discuss the techniques that facilitate the systematic gathering and reporting of information about the disturbed patient.
29.09 Discuss techniques that are useful in managing the effects of crisis situations on the Paramedic.
29.10 Discuss techniques that are useful in redirecting anxiety in relatives and bystanders.
29.11 Discuss appropriate action of the Paramedic when confronted with an uncontrollable, armed patient.
29.12 Discuss those situations in which the EMT-Paramedic may forcibly restrain or transport a patient.
29.13 Discuss and demonstrate techniques for restraining the violent patient.
29.14 Discuss and demonstrate techniques useful in protecting the EMT-Paramedic when attached by a violent patient.
29.15 Obtain a history, assess, and manage patients with behavioral emergencies.

30.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

30.01 Conduct a job search.
30.02 Secure information about a job.
30.03 Identify documents that may be required when applying for a job.
30.04 Complete a job application.
30.05 Demonstrate competence in job interview techniques.
30.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
30.07 Identify acceptable work habits.
30.08 Demonstrate knowledge of how to make job changes appropriately.
30.09 Demonstrate acceptable employee health habits.

31.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

31.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
31.02 Identify community resources and services available to the victims of immune-deficiency diseases.
31.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
31.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
31.05 Demonstrate knowledge of the legal aspects of AIDS.

MANAGEMENT OPTION:

32.0 DEMONSTRATE LEADERSHIP AND ADMINISTRATIVE SKILLS BASIC TO MANAGEMENT EMERGENCY MEDICAL SERVICE SYSTEMS -- The student will be able to:

32.01 Describe an emergency medical service system, its scope, national, state and local involvement, and the organizational climate that serves as the setting and framework for managing an emergency medical service system.
32.02 Identify current trends and perspectives related to the

management of health care organizations in general, and emergency medical service systems in particular, and the means by which the application of sound mangement principles and behavior can facilitate change.

32.03 Interpret managerial principles, practices and processes and relate them to emergency medical service systems.
32.04 Identify the role, responsibilities and parameters for the various levels of management within emergency medical service systems.
32.05 State the control processes and techniques used to ensure that the objectives, strategies, and policies of the emergency medical service system are achieved effectively and efficiently.
32.06 Relate the various aspects of organizational dynamics (decision making, motivations, leadership, and communication) to the needs and problems of emergency medical service systems.
32.07 Relate personnel administration practices to the total scope of labor, relations, including manpower acquisition, maintenance, and utilization.

33.0 INTERPRET FEDERAL, STATE AND LOCAL LAWS AS THEY APPLY TO EMERGENCY MEDICAL SERVICE SYSTEMS -- The student will be able to:

33.01 List and discuss federal, state and local laws, administrative rules, requirements and recommendations relating to emergency medical service systems.
33.02 List required standards and procedures for facility and staff.
33.03 Identify mandatory requirements regarding environmental health and safety standards.
33.04 Discuss the impact of legislative changes on emergency medical service systems.

34.0 DEMONSTRATE KNOWLEDGE OF OPERATIONAL AND ORGANIZATIONAL STRUCTURES OF EMERGENCY MEDICAL SERVICE SYSTEMS -- The student will be able to:

34.01 Describe the functions and standards of departments in emergency medical service systems.
34.02 Constrast administrative roles and responsibilities in different types of emergency medical service systems.
34.03 Describe principles and philosophies of emergency medical service systems.
34.04 Identify several basic principles of emergency medical care.
34.05 Describe communication techniques within health care systems.
34.06 Utilize state of the art language and terminology when communicating within the emergency medical service system.

35.0 DEMONSTRATE KNOWLEDGE OF PSYCHOLOGICAL PROBLEMS AND STRESSORS IN EMERGENCY MEDICAL SERVICE EMPLOYEES AND FIND APPROPRIATE SOLUTIONS -- The student will be able to:

35.01 Demonstrate knowledge of the worth and dignity of each employee.
35.02 Accommodate individual differences, characteristics, and behaviors.
35.03 Adjust employee schedules, personnel assignments, etc. to provide optimum performance.

36.0 DEMONSTRATE KNOWLEDGE OF MATERIALS AND SUPPLIES USED IN EMERGENCY MEDICAL SERVICE SYSTEMS -- The student will be able to:

36.01 Evaluate current inventory.
36.02 Prepare purchase orders with knowledge of current financial status and budgetary constraints.
36.03 Demonstrate knowledge of optimum quality, price, and quantity.

37.0 DEMONSTRATE KNOWLEDGE OF OCCUPATIONAL SAFETY AND HEALTH -- The student will be able to:

37.01 Prepare a plan for employee safety in event of emergency

situation involving business or office facilities.
37.02 Identify hazardous materials and substances in the workplace.
37.03 Identify appropriate storage facilities for all substances.
37.04 Conduct inservice for employees.
37.05 Respond to employee inquiries and post notices as needed.

38.0 DEMONSTRATE KNOWLEDGE OF APPROPRIATE WORKLOADS FOR EACH EMPLOYEE -- The student will be able to:

38.01 Prepare job descriptions.
38.02 Prepare job advertisements and notices.
38.03 Compute man-hours required for each job position within the emergency medical service system.
38.04 Identify factors that alter the workload and man-hours computed for each position.

39.0 REVIEW, APPROVE AND MONITOR DEPARTMENTAL CAPITAL AND OPERATIONAL BUDGETS -- The student will be able to:

39.01 Develop capital budget justification format.
39.02 Delegate capital budget preparation to key managers.
39.03 Analyze and approve appropriate capital budget items.
39.04 Develop an operational budget format.
39.05 Analyze and approve appropriate financial levels in each operational budget.

40.0 IDENTIFY AND APPLY LEGAL REIMBURSEMENT SYSTEMS -- The student will be able to:

40.01 Establish an item charge system that meets reimbursement system requirements.
40.02 Establish a mechanism for utilization review and quality assurance.
40.03 Develop an accounts receivable system which monitors and optimizes reimbursement.

41.0 COMPLY WITH ACCREDITATION STANDARDS OF GOVERNMENTAL OR GOVERNMENTAL-APPOINTED AGENCIES AND ORGANIZATIONS -- The student will be able to:

41.01 Describe and discuss procedures to meet required standards for emergency medical service systems.
41.02 Identify the required standards for health care personnel in general and emergency medical service personnel in particular.
41.03 Develop policies and operational procedures to meet required standards.
41.04 Establish liaison mechanisms with appropriate accrediting organizations.

42.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

42.01 Describe and demonstrate function and operation of basic computer systems.
42.02 Describe and demonstrate various types of computer systems and their specific applications.
42.03 Describe and demonstrate general applications such as word processing, database management, spreadsheets, and communications.
42.04 Describe and discuss special applications such as computer-aided dispatch (CAD), quality assurance, and inventory control.

EDUCATION OPTION

32.0 DEMONSTRATE PROFICIENCY IN COMMUNICATION SKILLS -- The student will be able to:

32.01 Demonstrate effective verbal communication skills.

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32.02 Demonstrate effective written communication skills.
32.03 Demonstrate effective listening skills.

33.0 DEMONSTRATE KNOWLEDGE OF BASIC TEACHING METHODS, LEARNING AND EDUCATIONAL PSYCHOLOGY -- The student will be able to:

33.01 Describe and demonstrate various methods of student learning.
33.02 Describe and demonstrate various methods of teaching as they apply to student learning techniques.
33.03 Describe and demonstrate competency-based education (CBE).
33.04 Describe and demonstrate short-term and long-term memory and the implications of each on the student learning process.
33.05 Describe and demonstrate various educational psychologies.

34.0 DESCRIBE AND DISCUSS CURRICULUM DESIGN AND DEVELOPMENT -- The student will be able to:

34.01 Develop and discuss needs assessments.
34.02 Develop a task analysis.
34.03 Develop student behavioral objectives.
34.04 Design and develop competency-based curriculum.
34.05 Integrate curriculum with current occupational responsibilities.
34.06 Perform on-going curriculum review and development.

35.0 DEMONSTRATE APPROPRIATE MEASUREMENT AND EVALUATION SKILLS -- The student will be able to:

35.01 Construct appropriate objective tests commensurate with curriculum.
35.02 Develop effecitve measurement instruments for student performance in clinical settings.
35.03 Develop effective evaluation tools for evaluating student performance.
35.04 Record, monitor, and provide feedback to student regardingstudent progress.

36.0 DEMONSTRATE MASTERY OF REQUIRED TECHNICAL SKILLS -- The student will be able to:

36.01 Demonstrate performance of basic life support instructor skills.
36.02 Demonstrate performance of advanced life support instructor skills.
36.03 Demonstrate performance of trauma life support instructor skills.
36.04 Demonstrate performance of other medical skills appropriate to the emergency medical serivces curriculum.

37.0 DEMONSTRATE CLASSROOM MANAGEMENT SKILLS -- The student will be able to:

37.01 Demonstrate and apply effective leadership skills.
37.02 Demonstrate and apply effective motivational skills.
37.03 Demonstrate and apply effective organizational skills.
37.04 Demonstrate and apply effecitve disciplinary skill.

38.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

38.01 Describe and demonstrate function and operation of basic computer systems.
38.02 Describe and discuss various types of computer systems and their specific applications.
38.03 Describe and discuss applications such as word processing, database management, spreadsheets, communications, and computer-aided instruction (CAI).

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Emergency Medical Technician

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.020500

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ______7-9 ______9-12 ______Postsecondary Adult Vocational

X Postsecondary Vocational Certificate ______Other ____________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: This is an instructional program that prepares students for employment as ambulance attendants, or emergency medical technicians (32508215) to function at the basic pre-hospital emergency medical technician level and treat various medical/trauma conditions using appropriate equipment and materials. The program prepares students for certification as EMT's in accordance with Chapter 10D-66 of the Florida Administrative Code. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services and the curriculum must adhere to the U.S. Department of Transportation (DOT) Emergency Medical Technician-Ambulance National Standard Curriculum. This is the initial level for a career in emergency medical services and the primary prerequisite for paramedic training and certification.

The content includes, but is not limited to, patient assessment, airway management, cardiac arrest, external and internal bleeding and shock, traumatic injuries, fractures, dislocations, sprains, poisoning, heart attack, stroke, diabetes, acute abdomen, communicable diseases, patients with abnormal behavior, alcohol and drug abuse, the unconscious state, emergency childbirth, burns, environmental hazards, communications, reporting, extrication and transportation of patient. The student must be proficient in patient assessment and evaluation, the use of suctioning devices, oral and nasal airways, resuscitation devices, oxygen equipment, sphygmomanometer and stethescope, splints of all types, pneumatic antishock garments, extrication tools, dressings and bandages, stretchers and patient carrying devices.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor.

III. CLINICAL ACTIVITIES: Hospital activity shall include a minimum of 10 hours of supervised experience in the hospital emergency department. Field activity shall include a minimum of 5 emergency runs.

IV. SPECIAL NOTE: American Heart Association or Red Cross certification in basic CPR is required of all graduates. A student physical requirement must be met in accordance with HRS guidelines. An appropriate student organization for providing the development of professional and leadership skills should be provided. These organizations may include HOSA, or an organization of the school's choice.

The typical length of this program for the average achieving student is 200 hours with a college credit certificate.

The Student Performance Standards for Emergency Medical Technology-EMT were adapted and condensed from the U.S. Department of Transportation Emergency Medical Technician-Ambulance National Standard Curriculum Instructor's Lesson Plans. Administrators and instructors should refer to these materials for additional detail.

When the word demonstrate is used in a standard, it shall require the actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Describe the role and responsibilities of the EMT.
02. Apply principles of infection control.
03. Conduct patient assessment for illness/injuries.
04. Recognize and treat airway obstruction and respiratory arrest.
05. Recognize and treat cardiac arrest.
06. Recognize and treat bleeding and shock.
07. Recognize and treat soft tissue injuries.
08. Recognize and treat musculo-skeletal injuries.
09. Recognize and treat injuries of the head, neck, face, eye and spine.
10. Recognize and treat injuries to the chest, abdomen and genitalia.
11. Recognize and treat medical emergencies.
12. Assist with emergency childbirth.
13. Demonstrate care for the pediatric patient.
14. Recognize and treat burns.
15. Recognize and treat environmental emergencies.
16. Recognize and manage victims of hazardous materials incidents.
17. Recognize and manage special care situations.
18. Demonstrate extrication.
19. Manage mass casualty incidents.
20. Demonstrate communication skills.
21. Demonstrate knowledge of systems operation.
22. Demonstrate lifting, moving, and transport of patients.
23. Demonstrate employability skills.
24. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations
SECONDARY NUMBER: ______

PROGRAM TITLE: Emergency Medical Techncian
POSTSECONDARY NUMBER: 0317.020500

01.0 DESCRIBE THE ROLE AND RESPONSIBILITIES OF THE EMERGENCY MEDICAL TECHNICIAN (EMT) -- The student will be able to:

01.01 Identify the role and responsibilities of the EMT.
01.02 Describe the importance of emergency care.
01.03 Identify legal aspects of emergency care.
01.04 Describe the importance of the U.S. Department of Transportation Emergency Medical Technician-Ambulance National Standard Curriculum.
01.05 Identify contributing agencies in your local EMS system.
01.06 Discuss the team concept in patient care.
01.07 Describe the mechanism for accessing your local EMS system.
01.08 List six areas of personal attitude and conduct expected of an EMT.
01.09 Describe State requirements for EMT certification and recertification.
01.10 List aspects of dealing with death and dying.
01.11 Recognize the EMT role in the organ donation program.
01.12 Describe the signs and symptoms of critical incident stress.
01.13 Recognize and describe the need for critical incident stress debriefing.

02.0 APPLY PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

02.01 Identify ways communicable diseases can be transmitted.
02.02 Practice Universal Precautions utilizing Center for Disease Control Guidelines (CDC).
02.03 Discuss procedures for reporting and follow-up after exposure to a communicable disease according to established standards.
02.04 Describe methods used to disinfect equipment and vehicles involved with an infectious patient.

03.0 CONDUCT PATIENT ASSESSMENT FOR ILLNESS/INJURIES -- The student will be able to:

03.01 Count and record pulse and respiration rate.
03.02 Measure and record blood pressure.
03.03 Identify level of consciousness.
03.04 Assess pupillary size and reaction.
03.05 Assess and record skin color and temperature.
03.06 Assess and record motor neurological status.
03.07 Assess and record reaction to pain.
03.08 Perform an examination for life threatening problems (primary/secondary survey).
03.09 Identify and describe signs and symptoms presented.
03.10 Describe the etiology of the condition presented.
03.11 Define topographic anatomical terms.
03.12 Describe the general functions of the major body systems.
03.13 List the four patient vital signs.
03.14 List five diagnositc signs in addition to the vital signs.
03.15 Demonstrate on a programmed patient the technique for completing a total patient assessment and identify and record diagnostic signs and their normal states.
03.16 Demonstrate a knowledge of infection control utilizing Centers for Disease Control guidelines.
03.17 Record and communicate in proper sequence their patient assessment information.
03.18 Assess a trauma victim following state requirements.

04.0 RECOGNIZE AND TREAT AIRWAY OBSTRUCTION AND RESPIRATORY ARREST -- The student will be able to:

04.01 Describe the basic mechanics of respiration.
04.02 Maintain an open airway using nasal oropharyngeal equipment.
04.03 Clear an obstructed airway.
04.04 Provide appropriate oxygen therapy and ventilatory assistance.
04.05 Perform mechanical suctioning of airway.
04.06 Describe the significance of oxygen to body tissues, particularly the brain.
04.07 List five components of the respiratory system and the functions of each.
04.08 List three signs of adequate air exchange.

05.0 RECOGNIZE AND TREAT CARDIAC ARREST -- The student will be able to:

05.01 Describe the basic mechanics of circulation.
05.02 List signs of cardiac arrest.
05.03 Perform cardiopulmonary resuscitation on adults, children, and infants according to AHA/ARC Standards.
05.05 List three possible complications of CPR.
05.06 List three instances when CPR, once initiated, may be terminated.

06.0 RECOGNIZE AND TREAT BLEEDING AND SHOCK -- The student will be able to:

06.01 Identify the types and signs of shock.
06.02 Identify the types and signs of external and internal bleeding.
06.03 Treat shock.
06.04 Control bleeding.
06.07 Use pneumatic counter pressure devices appropriately.

07.0 RECOGNIZE AND TREAT SOFT TISSUE INJURIES -- The student will be able to:

07.01 Describe the anatomy and physiology of the skin.
07.02 Identify types, signs, and significance of various wounds.
07.03 Provide basic wound care.
07.04 Apply dressings and bandages to wounds.
07.05 Describe how to care for a patient with an amputation and the care of the amputated part.

08.0 RECOGNIZE AND TREAT MUSCULO-SKELETAL INJURIES -- The student will be able to:

08.01 Describe the anatomy and physiology of the musculoskeletal system.
08.02 Identify types, signs, and symptoms of fractures, sprains and dislocations.
08.03 Select appropriate splint for treatment of presenting injury.
08.04 Demonstrate techniques of immobolizing all fractures and dislocations.

09.0 RECOGNIZE AND TREAT INJURIES OF THE HEAD, NECK, FACE, EYE AND SPINE -- The student will be able to:

09.01 Describe the anatomy and physiology of the antonomic, central, and peripheral nervous system.
09.02 List signs and symptoms of brain and spinal injuries.
09.03 Demonstrate care of patients with injuries to skull, face, eye, and neck.
09.04 Demonstrate care of patients with injuries to the brain and spinal cord.
09.05 Demonstrate spinal immobilization techniques.

10.0 RECOGNIZE AND TREAT INJURIES TO THE CHEST, ABDOMEN, AND GENITALIA -- The student will be able to:

10.01 Describe the anatomy and physiology of the abdomen, chest, and genitourinary systems.
10.02 Identify types, signs, and symptoms of injuries to the chest, abdomen, and genitalia.
10.03 Demonstrate care of patients with injuries to the chest, abdomen, and genitalia.
10.04 Demonstrate techniques of dressing and bandaging the chest, abdomen and genitalia.

11.0 RECOGNIZE AND TREAT MEDICAL EMERGENCIES -- The student will be able to:

11.01 State how to contact the appropriate poison control center.
11.02 Describe the signs, symptoms, and treatments for poison overdose victims.
11.03 Describe the signs, symptoms, and treatments for victims of venomous bites and stings.
11.04 Describe the signs, symptoms, and treatments for victims of heart and respiratory diseases.
11.05 Describe the signs, symptoms, and treatments for victims of cerebro-vascular incidents.
11.06 Describe the signs, symptoms, and treatments for diabetic patients.
11.07 Describe the signs, symptoms, and treatments for patients with communicable diseases.
11.08 Describe the signs, symptoms, and treatment of allergic reactions.
11.09 Describe the signs, symptoms, and treatments for patients having seizures.
11.10 Describe the signs, symptoms, and treatments for patients suffering from acute abdominal problems.
11.11 Describe the signs, symptoms, and treatment for substance abuse patients.
11.12 List signs/symptoms of croup and epiglottitis.

12.0 ASSIST WITH EMERGENCY CHILDBIRTH -- The student will be able to:

12.01 Describe the anatomy and physiology relevant to childbirth.
12.02 Assist mother in delivery.
12.03 Recognize and manage complications of delivery.
12.04 Assess and care for neonate.
12.05 Resuscitate the newborn if necessary.
12.06 Recognize the premature infant and provide appropriate care.
12.07 Provide routine post-partum care to mother.
12.08 Recognize and manage post-partum complications.
12.09 Identify and provide care for multiple births.
12.10 Document data relevant to delivery and care given.

13.0 DEMONSTRATE CARE FOR THE PEDIATRIC PATIENT -- The student will be able to:

13.01 Assess the pediatric patient and initiate appropriate age-level treatment.
13.02 Describe signs, symptoms, and treatment for croup/epiglottitis.
13.03 State normal vital signs in children.
13.04 Describe management of fevers in children.
13.05 Recognize and report signs of child abuse.

14.0 RECOGNIZE AND TREAT BURNS -- The student will be able to:

14.01 Identify causes of burns and describe the dangers to patient and rescuer.
14.02 Estimate and report the degree and size of a burn.
14.03 Provide emergency care to the burned victim.
14.04 Recognize and manage complications of burns.

15.0 RECOGNIZE AND TREAT ENVIRONMENTAL EMERGENCIES
-- The student will be able to:

15.01 Describe signs, symptoms, and treatment for patients suffering from heat cramps, heat exhaustion, heat stroke, hypothermia and frostbite.
15.02 Describe signs, symptoms, and treatment for the patient exposed to water-related emergencies.

16.0 RECOGNIZE AND MANAGE VICTIMS OF HAZARDOUS MATERIALS INCIDENTS
-- The student will be able to:

16.01 Identify methods used to identify a hazardous material.
16.02 Identify the threats of hazardous materials to the victim and the EMT.
16.03 Describe general principles used to manage a hazardous materials victim.
16.04 Describe methods used to decontaminate or isolate equipment or vehicles used in a hazardous materials incident.
16.05 Identify the agencies responsible for handling hazardous materials incidents.

17.0 RECOGNIZE AND MANAGE SPECIAL CARE SITUATIONS
-- The student will be able to:

17.01 Recognize the needs of and provide care for: geriatric, mentally/physically challenged, non-English speaking, and psychologically disturbed patients.
17.02 Recognize and manage behavioral emergencies including disruptive patients.
17.03 Recognize and manage sexual assault victims.
17.04 Recognize the needs of an provide care for the terminally ill.
17.05 Recognize and manage SIDS incidents.

18.0 DEMONSTRATE EXTRICATION -- The student will be able to:

18.01 Identify and describe common extrication tools and equipment.
18.02 Describe and demonstrate methods used to gain access to and extricate persons from entrapment, including a motor vehicle.
18.03 Discuss local policies related to providing extrication.

19.0 DISCUSS MASS CASUALTY INCIDENTS -- The student will be able to:

19.01 Define a mass casualty incident (MCI).
19.02 Discuss principles involved in management of an MCI.
19.03 Discuss principle of triage.
19.04 Identify and discuss treatment rationale for MCI.

20.0 DEMONSTRATE COMMUNICATION SKILLS -- The student will be able to:

20.01 Document patient care using required forms and reporting systems.
20.02 Demonstrate real or simulated use of radio communications.
20.03 Describe the capabilities and limitations of EMS communication equipment.
20.04 Recognize and report communcation equipment malfunctions.
20.05 Discuss the concept of Quality Assurance and the importance of oral and written communication in documenting patient care.

21.0 DEMONSTRATE KNOWLEDGE OF SYSTEMS OPERATION
-- The student will be able to:

21.01 Identify regulations and recommendations related to driving an emergency vehicle.
21.02 Describe emergency vehicle and equipment maintenance.
21.03 Discuss the non-medical role of the EMT in situations such as traffic accidents and crime scenes.

22.0 DEMONSTRATE LIFTING, MOVING, AND TRANSPORTING OF PATIENTS -- The student will be able to:

22.01 Demonstrate proper body mechanics when lifting, moving, and transporting patients.
22.02 Select and demonstrate use of transportation devices, lifts, and carries.
22.03 Secure patient in transport.

23.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

23.01 Conduct a job search.
23.02 Secure information about a job.
23.03 Identify documents that may be required when applying for a job.
23.04 Complete a job application.
23.05 Demonstrate competence in job interview techniques.
23.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
23.07 Identify acceptable work habits.
23.08 Demonstrate knowledge of how to make job changes appropriately.
23.09 Demonstrate acceptable employee health habits.

24.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

24.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
24.02 Identify community resources and services available to the victims of immune-deficiency diseases.
24.03 Identify as risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
24.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
24.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July 1993

PROGRAM TITLE: First Responder Postsecondary: ________

CODE NUMBER: Secondary 8415500

Florida CIP 0317.020501

SECONDARY SCHOOL CREDITS 1 COLLEGE CREDITS ____ **POSTSECONDARY ADULT VOCATIONAL CREDITS** ____

APPLICABLE LEVEL(S): ___ 7-9 ___ 9-12 _____ POSTSECONDARY ADULT VOCATIONAL

_____ POSTSECONDARY VOCATIONAL x OTHER 11-12,30-31

CERTIFICATION COVERAGE:
PRAC NUR @7 G
LAW ENF @7 G
CORR OFF @7 G
FIRE FIGHT @7 G
PARA MEDIC @7 G
PUB SERV @7 G
PCE OFF TR @ 7 G

I. **MAJOR CONCEPTS/CONTENT:** This is an instructional program that prepares any individual to provide initial care to sick or injured persons. A First Responder may use this training for employment. The First Responder is the first to arrive at the scene of an injury but does not have the primary responsibility for treating and transporting the injured person(s). First Responders may include law enforcement, life guard, fire services or basic life support non-licensed personnel who act as part of an organized emergency medical services team. This program must be approved by standards jointly developed by the Florida Department of Law Enforcement, Florida Department of Insurance and the Emergency Medical Services Section of the Department of Health and Rehabilitative Services as specified in Section 401.435, F.S.

The content includes, but is not limited to roles and responsibilities, vital signs, airway management, primary and secondary assessment, medicolegal aspects, BLS/CPR, bleeding and shock control, dressing and bandaging, musculoskeletal injuries, spine injuries, emergency documentation, patient transfer, medical and traumatic emergencies, respiratory distress, poisoning, burns, entrapment, childbirth, and infection control.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES:** Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction and be supervised by an instructor.

III. **SPECIAL NOTE:** Basic Rescuer CPR is required of all completers. An appropriate student organization for providing the development of professional and leadership skills should be provided. These organizations may include HOSA, or an organization of the school's choice.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for exit from this postsecondary vocational program is: Mathematics 8.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 40 - 150 hours.

The Student performance Standards for First Responder were adapted and condensed from U. S. Department of Transportation Emergency Medical Services; First Responder Training Course, National Standard Curriculum Instructors Lesson Plan and American Society for Testing and Materials, Committee F-30. Administrators and instructors should refer to these materials for additional details.

When the word demonstrate is used in a standard, it shall require the actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

01. Demonstrate an understanding of the role and responsibilities of the First Responder.
02. Demonstrate an understanding of medicolegal aspects.
03. Determine and record vital signs of a sick or injured person.
04. Use medical identification devices.
05. Conduct a primary assessment of problems that are a threat to life if not corrected immediately.
06. Demonstrate BLS/CPR procedures.
07. Recognize and control bleeding.
08. Recognize and control shock.
09. Identify and use mechanical aids to breathing.
10. Provide secondary assessment.
11. Identify musculo-skeletal injuries.
12. Identify the potential for a spinal injury.
13. Provide emergency evacuation and transfer of a sick or injured person.
14. Identify and care for a patient who is experiencing non-traumatic chest pain.
15. Identify and care for a patient who is experiencing respiratory distress.
16. Identify and care for a patient who is experiencing a diabetic emergency.
17. Identify and care for a patient who is experiencing a seizure.
18. Identify and care for a patient who has ingested a poisonous substance.
19. Identify and care for a patient who is in an altered state of consciousness.
20. Identify and care for a patient who is burned.
21. Identify and care for a patient suffering from an environmental emergency.
22. Identify and care for patients who are in special situations.
23. Provide triage to victims of multiple casualty incidents.
24. Recognize life-threatening situations.
25. Recognize entrapment situations.
26. Assist with emergency childbirth.
27. Identify critical incident stressors.
28. Communicate patient information to appropriate authorities.
29. Demonstrate knowledge of immune-deficiency diseases, including AIDS.
30. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8415500

PROGRAM TITLE: First Responder POSTSECONDARY NUMBER: H17.0215

01.0 DEMONSTRATE AN UNDERSTANDING OF THE ROLES AND RESPONSIBILITIES OF THE FIRST RESPONDER -- The student will be able to:

01.01 Describe the role of First Responder as a member of the EMS Team.
01.02 List and describe the responsibilities of the First Responder for the provision of prehospital emergency care within the local EMS system.

02.0 DEMONSTRATE AN UNDERSTANDING OF MEDICOLEGAL ASPECTS -- The student will be able to:

02.01 Describe and demonstrate an understanding of the medicolegal aspects of a First Responder's provision of emergency medical care in the jurisdiction having authority, including, but not limited to, duty to act, standard of care, consent to care, forcible restraint, abandonment, documentation and any applicable Good Samaritan Laws.
02.02 Practice within medicolegal standards.

03.0 DETERMINE AND RECORD VITAL SIGNS OF A SICK OR INJURED PERSON -- The student will be able to:

03.01 Take and record TPR accurately.
03.02 Take and record blood pressure accurately.
03.03 Determine and record skin color, temperature & moistness.
03.04 Determine and record the level of consciousness of the injured person.

04.0 USE MEDICAL IDENTIFICATION DEVICES -- The student will be able to:

04.01 Identify the most commonly used medical identification devices.
04.02 Apply the information contained on or in the medical identification devices to patient assessment and patient care procedures.

05.0 CONDUCT A PRIMARY ASSESSMENT OF PROBLEMS THAT ARE A THREAT TO LIFE IF NOT CORRECTED IMMEDIATELY -- The student will be able to:

05.01 Assess for an inadequate airway, inadequate respirations, inadequate circulation and profuse bleeding.
05.02 Recognize when immediate correction is necessary.
05.03 Use spinal precautions as appropriate.

06.0 DEMONSTRATE BLS/CPR PROCEDURES -- The student will be able to:

06.01 Establish and maintain an open airway.
06.02 Restore breathing and circulation by means of cardiopulmonary resuscitation.

07.0 RECOGNIZE AND CONTROL BLEEDING -- The student will be able to:

07.01 Identify items that can be used to control external bleeding and minimize the contamination of open wounds.
07.02 Apply pressure dressings that will control bleeding and minimize the contamination of open wounds.
07.03 Control external bleeding by means of direct pressure and elevation.
07.04 Control external bleeding by means of pressure

applied to the pressure points of the main supplying arteries.

07.05 Through observations of signs, symptoms and mechanisms of injury, identify the likelihood of internal bleeding.

07.06 Care for a patient who exhibits the signs and symptoms of internal bleeding.

08.0 RECOGNIZE AND CONTROL SHOCK -- The student will be able to:

08.01 On the basis of patient assessment and observation of a mechanism of injury, recognize the likelihood that shock may occur or be present.

08.02 Provide anti-shock measures as a part of routine patient care.

09.0 IDENTIFY AND USE MECHANICAL AIDS TO BREATHING -- The student will be able to:

09.01 Use available mechanical devices to assure the maintenance of an open airway.

09.02 Use available mechanical devices to assist ventilation.

09.03 Use available oxygen delivery equipment.

09.04 Use available suction equipment.

10.0 PROVIDE SECONDARY ASSESSMENT -- The student will be able to:

10.01 Conduct a methodical head-to-toe physical examination to discover conditions not found during the primary assessment.

10.02 Interview the sick or injured person to obtain facts relevant to the person's condition.

10.03 Interview co-workers, witnesses, family members, or other individuals to obtain facts relevant to the person's condition.

11.0 IDENTIFY MUSCULO-SKELETAL INJURIES -- The student will be able to:

11.01 Identify the various types of musculo-skeletal injuries.

11.02 With available supplies and equipment, including commercially available and improvised devices, immobilize and otherwise care for suspected fractures, dislocation, sprains and strains.

12.0 IDENTIFY THE POTENTIAL FOR A SPINAL INJURY -- The student will be able to:

12.01 On the basis of the patient assessment and an observation of a mechanism of injury, determine the likelihood of a spinal injury.

12.02 Perform manual spinal stabilization.

12.03 With available equipment, immobilize a person who has a suspected spinal injury.

13.0 PROVIDE EMERGENCY EVACUATION AND TRANSFER OF A SICK OR INJURED PERSON -- The student will be able to:

13.01 Describe situations when a person should be evacuated or transferred.

13.02 Alone or with a partner, use the most appropriate assist, drag or carry to move a sick or injured person from a dangerous location to a safe place.

13.03 Maintain safety precautions during evacuation and transfer.

14.0 IDENTIFY AND CARE FOR A PATIENT WHO IS EXPERIENCING NON-

TRAUMATIC CHEST PAIN -- The student will be able to:

14.01 On the basis of the patient assessment, identify a patient who is experiencing non-traumatic chest pain.
14.02 Care for a patient who is experiencing non-traumatic chest pain.

15.0 IDENTIFY AND CARE FOR A PATIENT WHO IS EXPERIENCING RESPIRATORY DISTRESS -- The student will be able to:

15.01 On the basis of the patient assessment, identify a patient who is experiencing respiratory distress.
15.02 Care for a patient who is experiencing respiratory distress.

16.0 IDENTIFY AND CARE FOR A PATIENT WHO IS EXPERIENCING A DIABETIC EMERGENCY -- The student will be able to:

16.01 On the basis of the patient assessment, identify a patient who is experiencing a diabetic emergency.
16.02 Care for a patient who is experiencing a diabetic emergency.

17.0 IDENTIFY AND CARE FOR A PATIENT WHO IS EXPERIENCING A SEIZURE -- The student will be able to:

17.01 On the basis of the patient assessment, identify a patient who is experiencing a seizure.
17.02 Care for a patient who is experiencing or has experienced a seizure.

18.0 IDENTIFY AND CARE FOR A PATIENT WHO HAS INGESTED A POISONOUS SUBSTANCE -- The student will be able to:

18.01 On the basis of the patient assessment or an observation of a mechanism of injury, identify poisoning as the possible cause of a patient's medical emergency.
18.02 Care for a patient who has ingested a poisonous substance.
18.03 Care for a patient who has inhaled a poisonous substance.
18.04 Care for a patient who has absorbed a poisonous substance.
18.05 Care for a patient who has been injected with a poisonous substance.

19.0 IDENTIFY AND CARE FOR A PATIENT WHO IS IN AN ALTERED STATE OF CONSCIOUSNESS -- The student will be able to:

19.01 On the basis of the patient assessment or an observation of a mechanism of injury, identify a patient with an altered level of consciousness.
19.02 Care for a patient whose level of consciousness has been altered.

20.0 IDENTIFY AND CARE FOR A PATIENT WHO IS BURNED -- The student will be able to:

20.01 Determine the severity of burns including degree, body surface area, type and location.
20.02 Care for a patient who has thermal burns.
20.03 Care for patient who has chemical burns.
20.04 Care for a patient who has electrical burns.

21.0 IDENTIFY AND CARE FOR A PATIENT SUFFERING FROM AN

ENVIRONMENTAL EMERGENCY -- The student will be able to:

21.01 On the basis of the patient assessment, determine that a medical emergency has resulted from exposure to head or cold.
21.02 Care for a patient who is experiencing heat cramps.
21.03 Care for a patient who is experiencing heat exhaustion.
21.04 Care for a patient who is experiencing heat stroke.
21.05 Care for a patient who is experiencing frostbite.
21.06 Care for a patient who is experiencing hypothermia.

22.0 IDENTIFY AND CARE FOR PATIENTS WHO ARE IN SPECIAL SITUATIONS -- The student will be able to:

22.01 Identify patients who have special needs.
22.02 Care for injured/ill children.
22.03 Care for the injured/ill elderly.
22.04 Care for the injured/ill physically disabled.
22.05 Care for the injured/ill developmentally disabled.

23.0 PROVIDE TRIAGE TO VICTIMS OF MULTIPLE CASUALTY INCIDENTS -- The student will be able to:

23.01 On the basis of patient assessments, categorize the victims of multiple casualty incidents according to the severity of injury or illness.
23.02 Use triage tags or other identification devices available locally to indicate priorities for prehospital emergency care and transportation to medical facilities.
23.03 Work as a member of a team to perform triage at locations of multiple casualty incidents.
23.04 Work as a member of a team to perform patient assessments at locations of multiple casualty incidents.
23.05 Work as a member of a team to carry out patient care procedures at the locations of multiple casualty incidents.

24.0 RECOGNIZE LIFE-THREATENING SITUATIONS -- The student will be able to:

24.01 On the basis of an assessment of a scene, take steps to minimize the chance of injury or death to all involved when confronted with a potentially life-threatening situation.
24.02 Utilize appropriate precautions to minimize the risk of disease transmission.

25.0 RECOGNIZE ENTRAPMENT SITUATIONS -- The student will be able to:

25.01 Identify accident-related hazards and undertake hazard control measures consistent with the capabilities of the First Responder and available equipment.
25.02 Safely use available equipment to gain access to persons who are entrapped.
25.03 Safely use available equipment to disentangle persons from mechanisms of entrapment.

26.0 ASSIST WITH EMERGENCY CHILDBIRTH -- The student will be able to:

26.01 Evaluate a mother to determine whether delivery is imminent.
26.02 Assist with a normal delivery.
26.03 Care for the mother and baby.
26.04 Identify abnormal childbirth situations and care for

the mother and baby within the First Responder's capabilities.

27.0 IDENTIFY CRITICAL INCIDENT STRESSORS -- The student will be able to:

27.01 Identify stressors which may affect the performance of a First Responder.
27.02 Identify stressors which may affect the behavior of a sick or injured person.
27.03 Carry out procedures to minimize critical incident stress.

28.0 COMMUNICATE PATIENT INFORMATION TO APPROPRIATE AUTHORITIES -- The student will be able to:

28.01 Describe information regarding a patients condition and treatment that need to be communicated.
28.02 Communicate the First Responder's observations and actions to whomever patient care is transferred.

29.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

29.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
29.02 Identify community resources and services available to the victims of immune-deficiency diseases.
29.03 Identify as risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
29.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers of Disease Control (CDC) guidelines.
29.05 Demonstrate knowledge of the legal aspects of AIDS.

30.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

30.01 Conduct a job search.
30.02 Secure information about a job.
30.03 Identify documents that may be required when applying for a job.
30.04 Complete a job application.
30.05 Demonstrate competence in job interview techniques.
30.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
30.07 Identify acceptable work habits.
30.08 Demonstrateknowledge of how to make job changes appropriately.
30.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Funeral Services

CODE NUMBER: Secondary _______ Postsecondary _______

Florida CIP 0312.030100

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____ Postsecondary Adult Vocational

X Postsecondary Vocational ______ Other ____________________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as embalmers (39011018), funeral attendants (68041489), or funeral directors or to provide supplemental training for persons previously or currently employed in these occupations. The program must be approved by the Florida Board of Funeral Directors and Embalmers so that the graduate may take the state licensing examination to practice as a licensed embalmer or funeral director, according to Chapter 470.006 FS.

The content includes, but is not limited to, techniques of embalming and restorative art, mortuary administration, funeral law, public health and sanitation, human anatomy and physiology, microbiology, pathology, mortuary social science, stress management, employability skills, leadership and human relations skills, and health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The intended outcomes are the same as the adopted curricular objectives of the American Board of Funeral Service Education which must be endorsed by accredited programs as curricular standards.

II. LABORATORY ACTIVITIES: The embalming, cosmetology and restorative art laboratories provide practical experience in the techniques of embalming, restorative art and cosmetology. The pathology lab provides the students with experience in identifying pathological destruction of body elements. A practicum experience in embalming and funeral directing, funeral home operations and management in the funeral home setting is provided.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

Upon completion of either the associate in science or certificate program in funeral service education program, graduates are qualified to write the National Funeral Service Board Examination.

One year of internship is required in the State of Florida for the embalmer or the funeral director license. These internships may be served concurrently. Upon completion of the internship, students are eligible to write the Florida state examination for the embalmer and funeral director license.

The typical length of this program for the average achieving student is an associate degree.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

01. Satisfactorily perform the basic techniques of embalming, restorative art, and cosmetology.
02. Give evidence of an understanding of the sociological, psychological, spiritual, physical, and legal needs of the family and community, and how to meet those needs in the treatment, handling, and disposition of the dead human body.
03. Explain the concepts of death, disinfection, preservation, and restoration of a dead human body.
04. Identify fundamental principles of personal and public health protection measures, and define the embalmer's obligation to this function.
05. Identify, define, and employ the necessary technical terminology to facilitate communication and cooperation with members of allied professions and the public.
06. Give evidence of personal manifestations of continued professional growth through education and research.
07. Identify those common conditions surrounding death which may prove of potential concern to the forensic pathologist.
08. Take care of the dead in a manner which recognizes the inherent dignity of man.
09. Identify the privileges of and be able to, through professional practices, fulfill the responsibilities of licensure.
10. Interpret and communicate the purposes, procedures, and values of funeral service.
11. Counsel people regarding funeralization.
12. Plan, implement, and direct a funeral according to the sociological, psychological, and theological needs of the person being served.
13. Identify and comply with the laws pertaining to funeral service practice and public health.
14. Manage personnel, facilities, and other resources.
15. Apply business principles and practices to funeral service.
16. Recognize the importance of inter-professional and intra-professional relationship and responsibilities.
17. Recognize the procedures for becoming an active member of the community and participating in community affairs.
18. Demonstrate employability skills.
19. Demonstrate an Understanding of Entrepreneurship.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Funeral Services POSTSECONDARY NUMBER: 0312.030100

01.0 SATISFACTORILY PERFORM THE BASIC TECHNIQUES OF EMBALMING AND RESTORATIVE ART AND COSMETOLOGY -- The student will be able to:

- 01.01 Demonstrate a knowledge of the body systems, with special emphasis on the circulatory system, to the degree needed to give him a working basis for studies in such related subjects as Embalming, Pathology, Public Health, and Restorative Art.
- 01.02 Specify representative chemicals in embalming fluids (arterial, cavity and accessory) and give their respective functions.
- 01.03 Describe the basic theories and laws of chemistry and relate their importance to both the living and deceased.
- 01.04 Identify and demonstrate the use of standard embalming instruments, machines and accessories.
- 01.05 Describe prior to, and during the procedure of embalming, the problems presented by disease processes and etiological factors.
- 01.06 Identify potentially harmful chemicals used in the preparation room, and the precautions to be taken with each.
- 01.07 Relate specified types of restoration to the correct embalming procedures.
- 01.08 Select, from a specified cosmetic medium, the correct colorants (compounds) to achieve a natural appearance under various conditions.
- 01.09 Exhibit a skill in modeling which reflects his ability to restore a problem case.
- 01.10 Interpret a photograph by evaluating the highlights and shadows, equal and unequal facial proportions, the specific form of the head, and the chief characteristics of each feature.
- 01.11 Identify and describe the norms of the head and face (direct and profile views), and each of the four facial features - identify four variations of these norms.
- 01.12 Classify and explain the principles of pigmentary (color) mixtures, and relate their application to cosmetic compounds and the influence of adjacent colors on one another in the funeral setting.
- 01.13 Name and locate three external body structures of the skull and explain how each influences surface form.
- 01.14 Identify and describe the use of various cosmetic and restorative materials and equipment.

02.0 GIVE EVIDENCE OF AN UNDERSTANDING OF THE SOCIOLOGICAL, PSYCHOLOGICAL, SPIRITUAL, PHYSICAL, AND LEGAL NEEDS OF THE FAMILY AND COMMUNITY, AND HOW TO MEET THOSE NEEDS IN THE TREATMENT, HANDLING, AND DISPOSITION OF THE DEAD HUMAN BODY -- The student will be able to:

- 02.01 Describe the varieties of funeralization seen in major religious and ethnic sub-cultures and in fraternal and military groups in America.
- 02.02 Relate contemporary sociological, theological, and philosophical thought to the matter of death, dying, bereavement and mourning in America.
- 02.03 Discuss and illustrate the interplay in society of custom and contemporary funeralization practices.
- 02.04 Distinguish among taboos, mores, folkways, customs, habits, laws, rites, rituals and ceremonies as sociological terms applied to American funerals.
- 02.05 State significant changes in funeralization and embalming methods during the last half century.
- 02.06 Describe the nature and meaning of death in different civilizations and cultures.

03.0 EXPLAIN THE CONCEPTS OF DEATH, DISINFECTION, PRESERVATION AND RESTORATION OF A DEAD HUMAN BODY -- The student will be able to:

03.01 Explain the common types of death.
03.02 Identify the physical states of matter and differentiate between physical and chemical changes.
03.03 Identify essential characteristics of autolysis, hydrolysis fermentation, and putrefaction in the area of the chemistry of decomposition.
03.04 Identify the essential characteristics of carbohydrates, lipids, and proteins in the area of basic biochemistry.
03.05 Define organic chemistry and describe the characteristic features of aliphatic and cyclic compounds, hydrocarbons, alcohols, aldehydes, ketones, acids, esters, ethers, and amines.
03.06 Identify and describe the prerequisites for specified restorative and cosmetic treatments.

04.0 IDENTIFY FUNDAMENTAL PRINCIPLES OF PERSONAL AND PUBLIC HEALTH PROTECTION MEASURES, AND DEFINE THE EMBALMER'S OBLIGATION TO THIS FUNCTION -- The student will be able to:

04.01 Explain the embalming-disinfection process as a public health procedure.
04.02 Describe infectious processes and explain the methods of transmission and control of common infectious diseases, with special emphasis upon their applications to the environment of the embalmer, the funeral director, and the public.
04.03 Identify and explain special treatments for cases involving common infections, traumatic and pathological conditions.
04.04 Recognize the pathological conditions which require special procedures in the removal, handling, preparation and disposition of human remains.
04.05 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
04.06 Document the relationship between his understanding of normal structure and functions of the human body and his development of healthful living habits.
04.07 Describe and demonstrate personal and environmental disinfection and decontamination procedures; explain proper use of major chemical disinfectants.

05.0 IDENTIFY, DEFINE, AND EMPLOY THE NECESSARY TECHNICAL TERMINOLOGY TO FACILITATE COMMUNICATION AND COOPERATION WITH MEMBERS OF ALLIED PROFESSIONS AND THE PUBLIC -- The student will be able to:

05.01 Demonstrate his acquisition and understanding of anatomical terminology at a level that will enable him to communicate effectively with members of allied professions and the lay public.
05.02 Identify common laboratory procedures and the common units of scientific measurement.
05.03 Identify the characteristic features of solutions, suspensions, and emulsions, and the processes of diffusion including osmosis, dialysis and hydrolysis.
05.04 Identify a list of elements and their valences, radicals, ions, compounds and reactions related to problems faced by the embalmer and funeral director, and give their symbols, formulas, and equations.
05.05 Differentiate between the beneficial micro-organisms and the actual pathogens and opportunists commonly associated with both the living human host and dead human remains.
05.06 Demonstrate an understanding of host parasite relations and interactions, and the requirements for successful parasitism.
05.07 Identify host defense mechanisms and demonstrate general knowledge of innate, natural and active immunologic responses.
05.08 Identify basic bacterial and fungal morphology and physiology.
05.09 Advise the layman of the medical benefits of post-mortem

examination.

06.0 GIVE EVIDENCE OF PERSONAL MANIFESTATIONS OF CONTINUED PROFESSIONAL GROWTH THROUGH EDUCATION AND RESEARCH -- The student will be able to:

06.01 Identify the reasons one should cooperate in community programs for controlling disease and promoting medical research.
06.02 Give evidence of his appreciation of, and interest in, the human body as a subject for independent study and continuing intellectual growth.

07.0 IDENTIFY THOSE COMMON CONDITIONS SURROUNDING DEATH WHICH MAY PROVE OF POTENTIAL CONCERN TO THE FORENSIC PATHOLOGIST -- The student will be able to:

07.01 Identify and explain those special conditions attending a death whereby notification of the death is required to be given to the proper official (such as Coroner, Public Health Officer, Veterans Administration, etc.).
07.02 Identify the technical manifestations of death which may be of medico-legal significance.

08.0 TAKE CARE OF THE DEAD IN A MANNER WHICH RECOGNIZES THE INHERENT DIGNITY OF MAN -- The student will be able to:

08.01 Give evidence of respect for human remains.

09.0 IDENTIFY THE PRIVELEGES OF AND BE ABLE TO, THROUGH PROFESSIONAL PRACTICES, FULFILL THE RESPONSIBILITIES OF LICENSURE -- The student will be able to:

09.01 Identify the privileges and their limitations accorded the licensee with regard to caring for the dead, and serving the living.
09.02 Identify the responsibilities of the funeral director to those who have called him with regard to:

a. Providing services and merchandise as selected.
b. Explaining the financial aspects of the funeral, and pricing method used.
c. Explaining death benefits and/or burial allowances.
d. Notifying the clergy of the death, if appropriate.
e. Coordinating with the clergy on religious aspects of the funeral.
f. Explaining merchandise and related representations regarding final description.
g. Preparing a financial memorandum pertaining to services, selected merchandise, supplemental items and cash advances.
h. Explaining applicable laws, rules and regulations.
i. Referring for professional counseling where family needs so indicate.

09.03 Identify the responsibilities of the funeral director to his profession with regard to:

a. Costs and procedures instituted where the services of two funeral directors are required.
b. Public education regarding funeralization.

09.04 Identify the responsibilities of the funeral director to the clergy in the matter of the policies, rules and regulations of churches.

09.05 Perform the following tasks APPLICABLE TO THE STATE IN WHICH HE INTENDS TO GAIN A LICENSE:

a. State the limitations placed upon the practice of the funeral director/embalmer.

b. Summarize the law, rules and regulations pertaining to:
   1) The transportation of the dead.
   2) Requirements and specifications of the funeral home, including the preparation room.

c. Define terms specified in the license laws, rules and regulations.

d. Identify the qualifications required of applicants for funeral director/mortician license.

e. Identify the grounds for issuance, revocation, suspension or refusal to renew or issue licenses.

f. Identify requirements for the conducting of funerals.

g. Identify the procedures for filing a complaint concerning a violation of the licensing law.

h. Identify provisions regarding reciprocity/courtesy cards.

10.0 INTERPRET AND COMMUNICATE THE PURPOSES, PROCEDURES, AND VALUES OF FUNERAL SERVICES -- The student will be able to:

10.01 Identify the purposes which the funeral serves for the family, friends, church, occupational associates, and community of the deceased.
10.02 Identify the values of the funeral.
10.03 Define common terms used in funeral service.
10.04 Identify the psychological purposes and values of the funeral.
10.05 Identify the sociological purposes and values of the funeral.
10.06 Organize and be prepared to deliver a speech on the purposes and values of the funeral.
10.07 Identify the philosophical purposes and values of funeral service.

11.0 COUNSEL PEOPLE REGARDING FUNERALIZATION -- The student will be able to:

11.01 Identify the major financial considerations that confront a bereaved family.
11.02 Identify the times or situations during which a funeral director will make use of counseling.
11.03 State the areas of counseling normally covered during funeralizations.
11.04 Describe the process of funeralization.
11.05 Describe contemporary opinions regarding psychology of death, grief, and bereavement.
11.06 Describe how the manner and cause of death affects the psychological needs of the bereaved.
11.07 List the information of importance to obtain during each type of counseling situation.
11.08 Identify and appraise the basic personal and personality problems that may appear during counseling situations.
11.09 Classify and analyze the various forms of funeral rites.
11.10 Describe contemporary opinions regarding sociology of death, grief, and bereavement.
11.11 Describe three or more types of counseling techniques applicable to funeral service, and give reasons for the use of each in individual circumstances.
11.12 Describe recent developments pertaining to the theologies of death, grief and bereavement.
11.13 Describe the effects of the Uniform Anatomical Gift Act on funeralization.
11.14 Identify and describe stages of dying.

12.0 PLAN, IMPLEMENT, AND DIRECT A FUNERAL ACCORDING TO THE SOCIOLOGICAL, PSYCHOLOGICAL AND THEOLOGICAL NEEDS OF THE PERSON BEING SERVED -- The student will be able to:

12.01 Develop a warm, friendly and tactful attitude towards the family at the first meeting.
12.02 Identify the items of information which are necessary to complete

the following forms:
1) Obituary
2) Death certificate
3) Social Security forms (SSA, 719, SSA 721)
4) Veteran's forms (Marker, Flag, Burial Allowance)
5) Burial/Transportation permits
6) Release/Authorization forms

12.03 Identify the person(s) who are qualified to give permission for release of the deceased from a hospital, or to sign the hospital death record, if required.

12.04 Identify the information to be secured from, and given to, the family upon initial family contact.

12.05 Describe the multiple steps required between initial notification of death and removal of the deceased.

12.06 Identify person(s) who qualify to authorize autopsy and embalming, and to approve the purpose and disclosure statement.

12.07 Identify the items and considerations usually included in the arrangement conference.

12.08 Identify the purpose of the death certificate.

12.09 Identify the appropriate times usually considered necessary to meet the funeral needs of those being served.

12.10 Identify the consideration normally involved in setting the order for the processional and recessional of a funeral service when the following are involved: 1. Casket, 2. Casket Bearer, 3. Children, 4. Clergy, 5. Friends, 6. Fraternal Orders, 7. Funeral Directors, 8. Honorary Bearers, 9. Next of kin, 10. Relatives, 11. Service Organization

12.11 Describe the multiple steps required between initial notification of death and removal of the deceased when the bereaved are not present at the time of death, regardless of the place or manner of death - including, but not limited to, the funeral director's determination of the need for a personal conference and/or counseling of the bereaved prior to the funeral arrangement conference.

12.12 Identify the items of clothing ordinarily required for the deceased.

12.13 Describe the proper techniques and equipment employed in the dignified removal of remains under diverse conditions.

12.14 Identify the reasons which require a discussion involving the family, the officiating clergyman, and the funeral director regarding visitation hours time of funeral, and other aspects of the service.

12.15 Identify the purpose of the Burial-Transit Permit.

12.16 Write obituary and death notices.

12.17 Identify the purpose and content of preselection counseling.

12.18 Identify the participants functioning in funeral service and explain their duties.

12.19 Describe considerations invlolved in the dignified movement of casketed remains.

12.20 State considerations for determining the order of the funeral procession.

12.21 Coordinate a variety of committal rites when these are a part of one funeral.

12.22 Identify the psychological and sociological value of the funeral arrangement conference.

12.23 Identify methods of dealing with inter-personal conflicts among family members.

12.24 Discuss dismissal procedures for leaving the grave site.

12.25 Explain the problems involved in harmonizing the colors of caskets in the funeral setting.

12.26 Describe the various types of floral arrangements and the considerations involved in their placement.

12.27 Identify requirement/procedure pertaining to cremation, calcination and burial at sea.

13.0 IDENTIFY AND COMPLY WITH THE LAWS PERTAINING TO FUNERAL SERVICE PRACTICE AND PUBLIC HEALTH -- The student will be able to:

13.01 Identify legally:
1) The nature of the right of the funeral director to take custody of a dead body, and the length of time such custody may be exercised.

2) The procedures for recovering the body.

3) The theory governing the right to recover for mutilation of a body, and the reasons for recovery of damages when mutilation results from negligence.

4) The duty of the funeral director regarding the personal effects of a decedent.

5) The basis of a funeral director's liability for the negligence of a volunteer driver in a funeral procession.

6) The legal duty of a funeral director regarding permits required by law.

7) The reasons for legal limitation on a funeral bill charged against an estate where creditor's claims exceed the assets of the estate.

8) How a testator may provide in his will for the payment of funeral expenses.

9) The duty of the funeral director for compliance with the Federal Trade Commission Funeral Rules.

10) The duty of the funeral director for compliance with the Magnuson-Moss Warranty Act (1975).

11) The duty of the funeral director for compliance with the provisions of Federal Wage and Hour Laws.

13.02 Describe status of a funeral bill as a charge against the estate.

13.03 Identify:
1) The conditions under which a funeral director must have permission before permitting an autopsy in his establishment, and state whether that permission may be qualified, restricted or revoked.

2) The liability of an embalmer for shaving a beard, cutting hair or otherwise altering the appearance of a body.

3) The legal duty of the funeral director regarding the personal effects of a decedent.

4) The extent of control a funeral director has over a funeral, and his legal duties to those attending a funeral or viewing a body at his funeral home.

5) The general rule in the determination of the validity of funeral expenses.

6) Which items are allowable in a funeral bill and which items are not allowable.

7) The legal basis for the modifications of the common law rule imposing liability upon the husband for the wife's funeral expenses.

8) Under what legal basis a widow may be required to pay the funeral expense of her deceased indigent husband.

13.04 Identify:

1) The liability of a volunteer who individually contracts to pay a funeral bill.

2) The liability of an executor or administrator for funeral expenses.

3) Why a funeral director should be familiar with the law of disinterment.

4) The circumstances under which exhumation is permitted in criminal cases, and in civil cases.

5) The usual procedure for obtaining a disinterment authorization, and the legal principles under which disinterment statutes are upheld.

6) Who has the primary right to disinter a body, and the nature of the crime of disinterment without proper authorization.

7) The grounds upon a funeral home can be enjoyed from futher operation in a residential district.

8) Whether a funeral home may be excluded from a sub-division by agreement of the property owners.

9) The conditions under which a funeral home or cemetary may be considered a nuisance per se.

10) Why the power of eminent domain may be invoked to acquire land for a public cemetery.

11) The power under which cemeteries may be regulated by the state, and what specific action must be taken to convert land to cemetery use.

12) The authority under which a private cemetery may enforce rules which control burial in it.

13) Why the owner of a cemetery lot may not use it for purposes other than burial, and whether or not he has the right to decorate and mark the grave.

14) Under what authority cemeteries are required to provide admittance to graves.

15) What kind of offense the grave desecration is.

13.05 Identify:
1) The essentials of a valid contract.
2) The reasons for maintaining death certificates.
3) How the remains may be transported by common carrier.
4) The legal consideration where persons die without medical attention.
5) The general order of nearest of kin including all relatives.
6) The legal implications of the concept of a "Decent Christian Burial."
7) Two reasons for filing an embalming report for each body prepared by the funeral home.
8) The function of a court of equity.
9) Two classes of bodies legally available for dissection.
10) The legal doctrine regarding the photographing of a dead body.
11) The privileges and limitations of one holding the power of attorney.
12) The liability of the funeral director for the custody of the remains.

13.06 Describe the legal basis for funeral service licensure stating the legal obligation of funeral and its purpose.

13.07 Identify:

1) The doctrine of Stare Decesis.
2) Whether a person may dispose of his body by will, whether a dead body may be insured, and whether it may be bought and sold.
3) Whether a dead body may be the subject of an action of replevin.
4) The authority of a ship over dead bodies.
5) The restrictions on burials of those dying of a communicable disease.
6) The conditions under which a dead body must be embalmed.
7) The effect of the decedent's wishes with respect to exercising the right and duty of disposition.
8) The proper position the funeral director should take when survivors of a decedent disputes the exercise of the right of disposition.

13.08 Define cremation and list the circumstances under which it be illegal.
13.09 Describe the rights of a party in controlling a funeral, and the rights of a party to attend a funeral.
13.10 Define "funeral contract", and state the legality of funeral contracts made by a decedent prior to death.
13.11 Describe the rights of the decedent in pre-arranging his own funeral.
13.12 Describe the legal limitation imposed in pre-arrangement agreements.
13.13 Describe the legal status of a dead body.
13.14 Identify the legal theory governing the right to recover from mutilation of a body, and the reasons for recovery of damages when mutilation results from negligence.
13.15 Identify the circumstances under which the state or one of its subdivisions is liable for funeral expenses.
13.16 Define and give the purpose of a Corner's/Medical investigator's inquest and inquiry.
13.17 Identify the rules and regulations governing burial in a National Cemetery.
13.18 Distinguish between the property and no-property theories of dead human bodies.
13.19 Identify two sources from which the rights and duties of a funeral director are derived.
13.20 Identify those steps a funeral director should take before building or purchasing a funeral home.
13.21 Distinguish between a cooperation, a partnership, and a proprietorship, and state the advantages and disadvantages of each.
13.22 Identify two forms of legally binding sales contracts.
13.23 Identify the conditions under which a note would be considered void.
13.24 Identify the preferred persons in the granting of letters of administration.
13.25 Distinguish between a stock and a bond.

14.0 MANAGE PERSONNEL, FACILITIES, AND OTHER RESOURCES

-- The student will be able to:

14.01 Answer the telephone properly.
14.02 Receive initial contact information accurately and appropriately.
14.03 Identify importance of:

1) The appearance and cleanliness of the funeral home, preparation room, funeral coach, limousine, and parking lot.

2) The need for confidentiality of funeral home records, family records and financial data.

3) Maintaining staff communications.

14.04 Identify the procedure for filing the death certificate at the proper agency and obtaining related permits if required.

14.05 Identify equipment necessary for the removal of an adult, child or infant from a hospital, residence or other place of death.

14.06 Identify all equipment appropriate for any funeral service.

14.07 Identify the procedure for properly receiving those who make a visitation to the funeral home.

14.08 Identify the procedures for dressing and casketing the remains.

14.09 Identify the procedures for placing the deceased in a visitation room.

14.10 Identify equipment needed to accomplish interment, inurnment, and entombment.

14.11 Identify the procedures for the completion of insurance forms.

14.12 Complete the recording of information in a register book.

15.0 APPLY BUSINESS PRINCIPLES AND PRACTICES TO FUNERAL SERVICE -- The student will be able to:

15.01 Prepare a financial memorandum pertaining to services provided, merchandise selected, cash advances, and supplemental items.

15.02 Define and properly use the terminology associated with funeral merchandise, merchandise display, and funeral supplies.

15.03 Identifv, define, and describe the various types of outer enclosures.

15.04 Differentiate between Functional, Unit, B-Unit and Itemization methods of quoting the price(s) of funeral service.

15.05 Apply basic accounting principles in keeping mortuary records.

15.06 Identify the major items of income and expenses which should be included in the budget of a funeral home.

15.07 Define basic accounting terms.

15.08 Analyze financial data, make financial decisions, and recognize the effects of economies on existing funeral services.

15.09 Identify the dual role of the funeral director, and list the major responsibilities of each role.

15.10 Distinguish between the direct and indirect approaches in helping clients to select merchandise, and list the advantages and disadvantages of each method.

15.11 Identify the insurance needs of a funeral director, and funeral service practice.

15.12 Identify the application of the Federal Truth in Lending Act to funeral service.

15.13 Identify the importance of purchase disclosures.

15.14 Identify the applications of the Federal Wage and Hour Act to funeral service.

15.15 Distinguish a cognovit from a promissory note.

16.0 RECOGNIZE THE IMPORTANCE OF INTER_PROFESSIONAL AND INTRA_PROFESSIONAL RELATIONSHIP AND RESPONSIBILITIES -- The student will be able to:

16.01 Identify common interest areas existing between funeral directors and: 1. Florists; 2. Cemeterians; 3. Monument dealers; 4. News media; 5. The legal profession; 6. The judiciary; 7. Hospital administrators; 8. Governmental agencies; 9. Local police.

16.02 Identify the aims and purposes of a funeral director-clergy relations committee.

16.03 Identify common concerns inherent in physician-funeral director relationships.

16.04 Name the major funeral director associations.

16.05 Identify the aims and purposes of a funeral director-pathologist autopsy committee.

16.06 Describe the structure and function of the Conference of Funeral Service Examining Boards, Inc.

16.07 Describe the structure of "multi-unit" funeral home organizations (public stock corporations).

16.08 Describe the structure and function of the Commission of Schools of the American Board of Funeral Service Education.

16.09 Describe the structure and function of the American Board of Funeral Service Education.
16.10 Describe the membership structure of the National Funeral Directors Association and other professional associations in the industry.

17.0 RECOGNIZE THE PROCEDURES FOR BECOMING AN ACTIVE MEMBER OF THE COMMUNITY AND PARTICIPATING IN COMMUNITY AFFAIRS -- The student will be able to:

17.01 Identify the necessary items to be considered in establishing a funeral home-public relations program.
17.02 Distinguish between institutional and funeral home advertising and state the primary purpose of each.

18.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

18.01 Conduct a job search.
18.02 Secure information about a job.
18.03 Identify documents that may be required when applying for a job.
18.04 Complete a job application.
18.05 Demonstrate competence in job interview techniques.
18.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
18.07 Identify acceptable work habits.
18.08 Demonstrate knowledge of how to make job changes appropriately.
18.09 Demonstrate acceptable employee health habits.

19.0 DEMONSTRATE AND UNDERSTANDING OF ENTREPRENEURSHIP -- The student will be able to:

19.01 Define entrepreneurship.
19.02 Describe the importance of entrepreneurship to the American economy.
19.03 List the advantages and disadvantages of business ownership.
19.04 Identify the risks involved in ownership of a business.
19.05 Identify the necessary personal characteristics of a successful entrepreneur.
19.06 Identify the business skills needed to operate a business efficiently and effectively.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Health Information Management

CODE NUMBER: Secondary _____ Postsecondary _______

Florida CIP 0317.050600

SECONDARY SCHOOL CREDITS_______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS_____

APPLICABLE LEVEL (S): ____7-9 ____9-12 _____ Postsecondary Adult Vocational

__X__ Postsecondary Vocational _____ Other ________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: This program is designed to prepare students for employment as medical record technicians (32911217), (079.367-014), health record technicians, or to provide supplemental training for persons previously or currently employed in these occupations. It prepares a person to take the national accreditation examination for Accredited Record Technician (ART). The program should meet the program requirements of the American Medical Association Committee of Allied Health Education and Accreditation in collaboration with the American Medical Record Association.

The content includes, but is not limited to, health information management, ethical and medico-legal aspects, basic computer usage for medical records, medical terminology, anatomy and physiology, pathophysiology, medical record science, word processing, statistics, coding, indexing, hospital procedures, directed clinical practice, and employability skills.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory facilities and equipment should be provided. Laboratory activities should be correlated with classroom activities and reinforced in the clinical area. Supervised clinical practice is an integral part of the program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students should be encouraged to join the American Medical Record Association and participate in the state/local association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The minimum basic skills grade level recommended for this postsecondary vocational program is: Reading 11.0, Mathematics 10.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Describe management functions of health information services.
05. Identify the legal aspects for the control and use of health information.
06. Describe various aspects of personnel supervision.
07. Participate in the development and implementation of health information systems.
08. Follow procedures to assure adequate documentation of health care.
09. File, maintain and retrieve health information.
10. Collect, compute, analyze and present health care statistics.
11. Participate in the review of health care services.
12. Use classification systems for health care information.
13. Discuss the health care delivery system.
14. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July 1993

PROGRAM AREA: Health Occupations
SECONDARY NUMBER: ________

PROGRAM TITLE: Health Information Management
POSTSECONDARY NUMBER: 0317.050600

01.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

01.01 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
01.02 Distinguish between factual reports and personal opinion.
01.03 Report observations in written and oral form.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 DESCRIBE MANAGEMENT FUNCTIONS OF HEALTH INFORMATION SERVICES -- The student will be able to:

04.01 Assist in preparing reports which reflect the status of a health information service.
04.02 Apply policies and procedures of a health information service.
04.03 Maintain quality and quantity of work performed in a health information service using established standards.
04.04 Maintain a systematic work flow for a health information service.
04.05 Retrieve information and prepare reports for the administrative and professional staff.
04.06 Define the role of the medical record technologist as a manager.

05.0 IDENTIFY THE LEGAL ASPECTS FOR THE CONTROL AND USE OF HEALTH INFORMATION -- The student will be able to:

05.01 Identify information in a health record that is confidential and non-confidential.
05.02 Determine what information may be released without an authorization.
05.03 Use legal terminology encountered in health information services.
05.04 Interpret and respond to various legal documents.
05.05 Assist in designing proper consent forms for release ofinformation.
05.06 Identify local, state and federal laws and regulations pertinent to the health information field.
05.07 Discuss the Code of Ethics of the American Medical Record Association.

06.0 DESCRIBE VARIOUS ASPECTS OF PERSONNEL SUPERVISION -- The student will be able to:

06.01 Describe the leadership, direction and documentation necessaryfor supervision of personnel.
06.02 Write a job description.

06.03 Apply personnel policies within a health information service.

07.0 PARTICIPATE IN THE DEVELOPMENT AND IMPLEMENTATION OF HEALTH INFORMATION SYSTEMS -- The student will be able to:

07.01 Apply policies and procedures for collecting data, computing statistics and retaining information by manual or automated systems.
07.02 Interpret and utilize the language of medicine.
07.03 Spell, define and pronounce medical words and their components.
07.04 Explain basic principles of disease, its etiology, pathophysiology, diagnostic techniques and treatment.
07.05 Input data into computerized health information systems.

08.0 FOLLOW PROCEDURES TO ASSURE ADEQUATE DOCUMENTATION OF HEALTH CARE -- The student will be able to:

08.01 Follow procedures for quantitative and qualitative analysis ofhealth records.
08.02 Identify purposes and uses of health records.
08.03 Identify basic health record forms and required content.
08.04 Assemble and analyze a health record.
08.05 Follow procedures for the retention of health information.
08.06 Follow procedures designed to control the flow of health care data.
08.07 Follow procedures for the destruction of health records.
08.08 Identify health information imaging techniques and equipment.

09.0 FILE, MAINTAIN AND RETRIEVE HEALTH INFORMATION -- The student will be able to:
09.01 Identify and describe admission numbering systems and their advantages and disadvantages.
09.02 Identify and describe filing systems and their advantages and disadvantages.
09.03 File and retrieve health information.
09.04 Retrieve health information from manual or automated systems.

10.0 COLLECT, COMPUTE, ANALYZE AND PRESENT HEALTH CARE STATISTICS -- The student will be able to:

10.01 Abstract data from health records.
10.02 Identify trends in data processing of health information.
10.03 Calculate and present health care statistical information.

11.0 PARTICIPATE IN THE REVIEW OF HEALTH CARE SERVICES -- The student will be able to:

11.01 Describe health care organizational and management structure.
11.02 List the functions of medical staff committees.
11.03 Describe quality assurance, risk management and utilization review systems.
11.04 Assist in the development and analysis of peer review tools.
11.05 Define the role and functions of the professional review organization (PRO).

12.0 USE CLASSIFICATION SYSTEMS FOR HEALTH CARE INFORMATION -- The student will be able to:

12.01 Trace the development of nomenclatures and classification systems.
12.02 Identify conventions and characters used in classification systems.
12.03 Follow existing procedures to code diagnoses, procedures and systems.
12.04 Perform DRG assignment.

13.0 DISCUSS THE HEALTH CARE DELIVERY SYSTEM -- The student will be able to:

13.01 Define health as stated by the World Health Organization.
13.02 List factors which influence health of the individual, nation and world.
13.03 List the responsibilities of national, state and local health agencies.
13.04 Describe the types of health care delivery systems.
13.05 Define the role of the health care consumer.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

COURSE TITLE: Health Occupations Cooperative Education - OJT

CODE NUMBER: Secondary 8400410 Postsecondary H179999

Florida CIP 0317.9999CP

SECONDARY
SCHOOL CREDITS Multiple COLLEGE CREDITS ____ POSTSECONDARY ADULT
VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____7-9 ____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 10-12, 30, 31

CERTIFICATION COVERAGE: ANY HEALTH OCCUP ED G ANY HEALTH OCC/TC COOPED ED G

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide the on-the-job training component when the cooperative method of instruction is used to prepare students for employment in health occupations. On-the-job experiences are provided as a part of a job preparatory program which will develop occupational competencies required for employment in the occupation chosen by the student as a career choice or to provide experiences that further develop the competencies acquired by the student in an in-school job preparatory program. This method of delivery is not intended for supplemental vocational course instruction and shall not be claimed for supplemental FTE purposes.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: A work station is provided as required to support the on-the-job training activities of the student.

III. SPECIAL NOTE: The Health Occupations Students of America is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional course.

For the on-the-job training component, the following is required for each student: a training plan, signed by the student, teacher and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed. The teacher/coordinator must visit each job site a minimum of once during each grading period for the purpose of evaluating the student's progress in attaining the competencies listed in the training plan.

The Cooperative - OJT course may be taken by a student for one or more semesters. A student may earn multiple credits in this course. The specific student performance standards which the student must achieve to earn credit must be specified in the OJT training plan.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Perform designated job skills.
02. Demonstrate work ethics.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1992

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8400410

COURSE TITLE: Health Occupations Cooperative Education-OJT POSTSECONDARY NUMBER: HOC0940

01.0 PERFORM DESIGNATED JOB SKILLS -- The student will be able to:

01.01 Perform tasks as outlined in the training plan.
01.02 Demonstrate job performance skills.
01.03 Demonstrate safety procedures on the job.
01.04 Maintain appropriate records.
01.05 Attain an acceptable level of productivity.
01.06 Demonstrate appropriate dress and grooming habits.
01.07 Recognize limits of authority and responsibility.
01.08 Identify patient's rights and responsibilities.
01.09 Identify legal ramifications of actions/inactions in the job area.
01.10 Recognize and value time.
01.11 Recognize and value accuracy.

02.0 DEMONSTRATE WORK ETHICS -- The student will be able to:

02.01 Follow directions.
02.02 Demonstrate good human relations skills on the job.
02.03 Demonstrate good work habits.
02.04 Demonstrate acceptable business ethics.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Health Occupations Education Directed Study

CODE NUMBER: Secondary 8400100 Postsecondary ______

Florida CIP 0317.999910

SECONDARY SCHOOL CREDITS Multiple COLLEGE CREDITS ____ POSTSECONDARY ADULT VOCATIONAL CREDITS ____

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 11-12, 30, 31

CERTIFICATION COVERAGE: ANY HEALTH OCCUP ED G

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide students with additional competencies in a Health Occupations program that will enhance their opportunities for employment in the occupation chosen by the student. The content is prescribed by the instructor based upon the individual student's assessed needs for directed study.

II. LABORATORY ACTIVITIES: A work station is provided as required to support the training activities of the student.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

This course may be taken only by a student who has completed, or is currently completing, all of the courses prescribed in the Course Code Directory for a specific secondary job preparatory program and needs additional study in this program. A student may earn multiple credits in this course.

The specific student performance standards which the student must master to earn credit must be outlined in an instructional plan developed by the instructor.

The student enrolled in this course must be reported using the Course Code Directory program number for the specific job preparatory program in which the student is continuing.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Perform designated job skills.
02. Demonstrate a knowledge of the basic skills in mathematics and language appropriate for the chosen occupation.

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations — SECONDARY NUMBER: 8400100

COURSE TITLE: Health Occupations Education Directed Study — POSTSECONDARY NUMBER: ______

01.0 PERFORM DESIGNATED JOB SKILLS -- The student will be able to:

01.01 Demonstrate job performance skills.
01.02 Follow prescribed safety procedures.
01.03 Display increasingly higher levels of productivity.

02.0 DEMONSTRATE A KNOWLEDGE OF THE BASIC SKILLS IN MATHEMATICS AND LANGUAGE APPROPRIATE FOR THE CHOSEN OCCUPATION -- The student will be able to:

02.01 Use addition, subtraction, multiplication, and division to solve problems encountered in the chosen occupation.
02.02 Read, understand, and find information relative to the chosen occupation.
02.03 Write logical and grammatically correct statements and reports with correct spelling appropriate for the chosen occupation.

CURRICULUM FRAMEWORK
PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION
EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Health Service Occupations

CODE NUMBER: Secondary 8415100
Postsecondary H170699

Florida CIP 0317.069901

SECONDARY SCHOOL CREDITS 3
COLLEGE CREDITS ______
POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 ____ Postsecondary Adult Vocational

______ Postsecondary Vocational x Other 10-12, 30, 31

CERTIFICATION COVERAGE:
NURSING ED @5
TEC MED @7 G
PRAC NURSE @7 G
PH THERTEC @7 G
Paramedic @7 G
PH THERAPH @6
TEC X RAY @7 G
LAB TECH @7 G
MED ASST @7 G
DENTAL ASST @7 G
MENTAL HEALTH @7 G
LAB ASST @7 G
RESP THER @7 G
MED RECTEC @7 G
RESP TEC @7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as health aides (66008434), or to provide supplemental training for persons previously or currently employed in these occupations, or to pursue further education in the health care industry.

The content includes, but is not limited to, communication skills; legal and ethical practice; leadership and employability skills; safe and efficient work practices; and integration of scientific principles based on anatomy and physiology, medical terminology, disease control, conditions of illness and common therapy, and representative skills performed by major health care workers.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8415110	Health Service Occupations 1
8415120	Health Service Occupations 2
8415130	Health Service Occupations 3

II. LABORATORY ACTIVITIES: Students will perform skills representative of major areas of health care in the laboratory setting. Clinical learning experiences are required and must correlate with didactic and laboratory experiences. Team teaching between teachers of Anatomy, Physiology and Health Occupations Instructors is encouraged.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the teacher, and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a place of employment which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0, and Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

The typical length of this program for the average achieving student is 450 clock hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate application of knowledge of basic math skills.
02. Demonstrate basic competencies in science.
03. Demonstrate accepted communication and measurement skills in both clinical and classroom activities.
04. Demonstrate employability skills.
05. Identify anatomic structure and function of body systems in relation to the effect of diseases and services performed by health care workers.
06. Successfully complete clinical learning experiences by demonstrating competency of selected occupational skills representative of major areas of health care.
07. Identify at least one health career which meets personal goals.
08. Select health care services in keeping with accepted consumer practices.
09. Recognize and practice acceptable behavior in the clinical settings.
10. Practice accepted principles of safety in clinical settings.
11. Demonstrate knowledge of ethical behavior and legal aspects of health care in clinical settings.
12. Identify the characteristics of the health care delivery system.
13. Demonstrate knowledge of immune-deficiency diseases, including AIDS.
14. Demonstrate computer literacy and computational skills.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8415100

PROGRAM TITLE: Health Service Occupations POSTSECONDARY NUMBER: HCP0400

01.0 DEMONSTRATE APPLICATION OF KNOWLEDGE OF BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, and analyze and report on graphs, charts, and tables.
01.02 Student will measure time, temperature, distance, capacity, and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Make estimates and approximations and judge the reasonableness of the result.
01.05 Convert from regular time to 24 hour clock time.

02.0 DEMONSTRATE BASIC COMPETENCIES IN SCIENCE -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Demonstrate ability to evaluate and draw conclusions.

03.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILLS IN BOTH CLINICAL AND CLASSROOM ACTIVITIES -- The student will be able to:

03.01 Recognize and utilize various forms of communication.
03.02 Recognize barriers to communication.
03.03 Use appropriate medical terminology and abbreviations.
03.04 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
03.05 Distinguish factual reports and personal opinion.
03.06 Demonstrate ability to report observations in written or oral form.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Identify resources for employment in a health care field.
04.02 Secure information about a employment.
04.03 Identify documents that may be required when applying for employment.
04.04 Complete an employment application form correctly.
04.05 Demonstrate competence in employment interview techniques.
04.06 Identify and demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work behaviors.
04.08 Describe methods used to make job changes appropriately.
04.09 Identify laws relating to employment.

05.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS -- The student will be able to:

05.01 Identify anatomic structure and function of body systems.
05.02 Identify factors relating to transmission of disease.
05.03 Demonstrate medical and surgical aseptic technique.
05.04 Identify cells and tissue microscopically and macroscopically.
05.05 Perform skills related to the integumentary system.
05.06 Identify health careers related to the integumentary system.
05.07 Identify diseases related to the integumentary system.
05.08 Identify health factors which affect optimal function of the integumentary system.

05.09 Identify diseases related to the muscular/skeletal systems.
05.10 Perform skills related to the muscular/skeletal systems.
05.11 Identify health factors which affect optimal function of the muscular/skeletal system.
05.12 Identify careers related to the muscular/skeletal systems.
05.13 Use proper body mechanics to prevent injury to the patient and one's self.
05.14 Assist with therapeutic exercises so as to prevent injury, and facilitate rehabilitation of the muscular/skeletal systems.
05.15 Perform skills related to respiratory care.
05.16 Identify diseases related to the respiratory system.
05.17 Identify factors which affect optimal function of the respiratory system such as: hazards of smoking, environmental pollution and spread of communicable diseases.
05.18 Identify health careers related to the respiratory system.
05.19 Identify diseases related to the nervous system and sensory organs.
05.20 Perform skills related to the nervous system and sensory organs.
05.21 Identify health factors which affect optimal functions of the nervous system and sensory organs such as proper use of prescription drugs, hazards of illicit drugs/alcohol, and noise pollution.
05.22 Identify health careers related to the nervous system and sensory organs.
05.23 Identify diseases related to the urinary system.
05.24 Perform skills related to the urinary system.
05.25 Identify health factors which affect optimal function of the urinary system such as adequate fluid intake, and bladder control.
05.26 Identify health careers related to the urinary system.
05.27 Identify conditions and diseases related to the reproductive system.
05.28 Perform skills related to the reproductive systems.
05.29 Identify health factors which affect optimal function of the reproductive systems such as immune-deficiency diseases.
05.30 Identify health careers related to the reproductive systems.
05.31 Identify diseases related to the digestive system.
05.32 Perform skills related to the digestive system.
05.33 Identify health factors which affect optimal function of the digestive system such as dietary and nutritional factors.
05.34 Identify health careers related to the digestive system, including dental and dietetic occupations.
05.35 Identify diseases related to the circulatory system.
05.36 Perform skills related to the circulatory system.
05.37 Identify health factors which affect optimal function of the circulatory system such as cardiovascular exercise, and weight control and stress management.
05.38 Identify health careers related to the circulatory system.
05.39 Identify conditions and diseases related to the endocrine system.
05.40 Perform skills related to the endocrine system.
05.41 Identify health factors that will affect optimal functioning of the endocrine system.
05.42 Identify Health Careers related to the endocrine system.

06.0 SUCCESSFULLY COMPLETE CLINICAL LEARNING EXPERIENCES BY DEMONSTRATING COMPETENCY OF SELECTED OCCUPATIONAL SKILLS REPRESENTATIVE OF MAJOR AREAS OF HEALTH CARE -- The student will be able to:

06.01 Perform skills appropriate to each body system.
06.02 Complete clinical rotations representing selected health career clusters using skills learned in outcome 01.0.
06.03 Demonstrate interpersonal relationship, self discipline, and dependability.
06.04 Perform skills in first aid and CPR.

07.0 IDENTIFY AT LEAST ONE HEALTH CAREER WHICH MEETS PERSONAL GOALS -- The student will be able to:

07.01 Examine the requirements of workers in the major health career clusters.
07.02 Compare personal qualities and aptitudes with requirements of selected careers.
07.03 Investigate other health careers not related directly to body systems such as, but not limited to, hospital administration, biomedical technologies, marketing, public relations, environmental services, and other support services.
07.04 Decide which health career, if any, meets his/her personal career goals.

08.0 SELECT HEALTH CARE SERVICES IN KEEPING WITH ACCEPTED CONSUMER PRACTICES -- The student will be able to:

08.01 Demonstrate ability to investigate and select qualified health care practitioners and providers.
08.02 Identify and compare components of available health insurance plans.
08.03 Demonstrate knowledge of therapeutic uses and misuses of over-the-counter drugs.
08.04 Identify and recognize services of available community agencies.

09.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE CLINICAL SETTINGS -- The student will be able to:

09.01 Describe the concept of positive self concepts.
09.02 Identify basic human needs according to Maslow's theory.
09.03 Describe and demonstrate appropriate behavior.
09.04 Recognize multicultural behavior differences.

10.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN CLINICAL SETTINGS -- The student will be able to:

10.01 Demonstrate safe use, care and maintenance of equipment and materials.
10.02 Practice safe transport and transfer of patients.
10.03 Properly identify patients.
10.04 Follow approved clinical procedures for labeling.
10.05 Use good observational skills and report appropriately.
10.06 Recognize and report signs of abuse and neglect.
10.07 Follow emergency procedures as outlined by instruction.
10.08 Identify and perform skills related to "Universal Precautions".

11.0 DEMONSTRATE KNOWLEDGE OF ETHICAL BEHAVIOR AND LEGAL ASPECTS OF HEALTH CARE IN CLINICAL SETTINGS -- The student will be able to:

11.01 Recognize lines of authority and responsibility of health care workers.
11.02 Identify patient rights and responsibilities.
11.03 Identify legal ramifications of actions/inactions.
11.04 Describe current laws affecting health care.

12.0 IDENTIFY THE CHARACTERISTICS AND COMPONENTS OF THE HEALTH CARE DELIVERY SYSTEMS, USING ACCEPTABLE TERMINOLOGY -- The student will be able to:

12.01 Identify the basic components of the health care delivery system.
12.02 Describe the types of health care and identify the major types of health care facilities.
12.03 Identify health care planning agencies and services available at local, state, national and international levels.
12.04 Identify the major events that transformed health care.
12.05 Identify current developments which will affect health care.

13.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
13.02 Identify community resources and services available to the victims of immune-deficiency diseases.
13.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
13.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
13.05 Demonstrate knowledge of the legal aspects of AIDS.

14.0 DEMONSTRATE COMPUTER LITERACY AND COMPUTATIONAL SKILLS -- The student will be able to:

14.01 Define terms and demonstrate an understanding of concepts related to computers.
14.02 Describe the uses of computers in the health occupation being studied.
14.03 Demonstrate computational skills relevant to job requirements of the health occupation being studied.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health COURSE CREDIT: 1

PROGRAM TITLE: Health Service Occupations PROGRAM NUMBER: 8415100

COURSE TITLE: Health Service Occupations 1 COURSE NUMBER: 8415110

COURSE DESCRIPTION:

This course includes a logical integration of scientific concepts relating to health care. These concepts are based on anatomy and physiology, microbiology, chemistry, physics, nutrition, psychology and sociology.

Laboratory activities are correlated with theory content.

This course or anatomy and physiology is a prerequisite or corequisite to Health Service Occupations 2 and Health Service Occupations 3.

02.0 DEMONSTRATE BASIC COMPETENCIES IN SCIENCE -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Demonstrate ability to evaluate and draw conclusions.

05.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS -- The student will be able to:

05.01 Identify anatomic structure and function of body systems.
05.02 Identify factors relating to the transmission of disease.
05.04 Identify cells and tissue microscopically and macroscopically.
05.07 Identify diseases related to the integumentary system.
05.08 Identify health factors which affect optimal function of the integumentary system.
05.09 Identify diseases related to the muscular/skeletal systems.
05.11 Identify health factors which affect optimal functions of the muscular/skeletal system.
05.16 Identify diseases related to the respiratory system.
05.17 Identify factors which affect optimal function of the respiratory system such as: hazards of smoking, environmental pollution and spread of communicable diseases.
05.19 Identify diseases related to the nervous system and sensory organs.
05.21 Identify health factors which affect optimal functions of the nervous system and sensory organs such as proper use of prescription drugs, hazards of illicit drugs/alcohol, and noise pollution.
05.23 Identify diseases related to the urinary system.
05.25 Identify health factors which affect optimal function of the urinary system such as adequate fluid intake, and bladder control.
05.27 Identify conditions and diseases related to the reproductive system.
05.29 Identify health factors which affect optimal function of the reproductive systems such as immune-deficiency diseases.
05.31 Identify diseases related to the digestive system.
05.33 Identify health factors which affect optimal function of the digestive system such as dietary and nutritional factors.
05.35 Identify diseases related to the circulatory system.
05.37 Identify health factors which affect optimal function of the circulatory system such as cardiovascular exercise, and weight

control and stress management.

05.39 Identify conditions and diseases related to the endocrine system.

05.41 Identify health factors that will affect optimal functioning of the endocrine system.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health COURSE CREDIT: 1

PROGRAM TITLE: Health Service Occupations PROGRAM NUMBER: 8415100

COURSE TITLE: Health Service Occupations 2 COURSE NUMBER: 8415120

COURSE DESCRIPTION:

This course provides common skills performed by the majority of health care workers in hospitals, nursing homes and other health care agencies.

Those students who may choose nursing assistant for their clinical experience must complete all the nursing assistant competencies listed in Rule 6A-.080 to be eligible to take the State Certified Nursing Assistant (CNA) examination. This includes 40 hours clinical experience, 20 of which must be in a licensed nursing home. Practical classroom/laboratory and clinical experiences are correlated with the theory of this course. students will perform health care skills in the clinical setting under the supervision of a qualified Health Occupations teacher and/or qualified health professional.

This course is a co-requisite to Health Service Occupations 3.

01.0 DEMONSTRATE APPLICATION OF KNOWLEDGE OF BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, and analyze and report on graphs, charts, and tables.
01.02 Student will measure time, temperature, distance, capacity and mass/weight.
01.03 Make and use measurements in both traditional and metric units.
01.04 Make estimates and approximations and judge the reasonableness of the result.
01.05 Convert from regular time to 24-hour clock time.

03.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILL IN BOTH CLINICAL AND CLASSROOM ACTIVITIES -- The student will be able to:

03.01 Recognize and utilize various forms of communication.
03.02 Recognize barriers to communication.
03.03 Use appropriate medical terminology and abbreviations.
03.04 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
03.05 Distinguish factual reports and personal opinion.
03.06 Demonstrate ability to report observations in written or oral form.

05.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS -- The student will be able to:

05.03 Demonstrate medical and surgical aseptic technique.
05.05 Perform skills related to the integumentary system.
05.10 Perform skills related to the muscular/skeletal systems.
05.13 Use proper body mechanics to prevent injury to the patient and one's self.
05.14 Assist with therapeutic exercises so as to prevent injury, facilitate rehabilitation of the muscular/skeletal systems.
05.15 Perform skills related to respiratory care.
05.20 Perform skills related to the nervous system and sensory organs.
05.24 Perform skills related to the urinary system.
05.28 Perform skills related to the reproductive systems.
05.32 Perform skills related to the digestive system.
05.36 Perform skills related to the circulatory system.
05.40 Perform skills related to the endocrine system.

STUDENT PERFORMANCE STANDARDS　EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health　COURSE CREDIT: 1

PROGRAM TITLE: Health Service Occupations　PROGRAM NUMBER: 8415100

COURSE TITLE: Health Service Occupations 3　COURSE NUMBER: 8415130

COURSE DESCRIPTION: This course provides the opportunity to study the characteristics of workers in the major health career clusters in order to identify a personal career goal. The content includes, but is not limited to, communication skills; and computer literacy and computational skills; legal and ethical practice; leadership and employability skills; safe and efficient work practices. It provides for continued development of skills in specialty areas.

Clinical learning experiences are required and must correlate with didactic and laboratory activities.

This course or anatomy and physiology is a corequisite to Health Service Occupations 2.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Identify resources for employment in a health care field.
04.02 Secure information about employment.
04.03 Identify documents that may be required when applying for employment.
04.04 Complete an employment application form correctly.
04.05 Demonstrate competence in employment interview techniques.
04.06 Identify and demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work behaviors.
04.08 Describe methods used to make job changes appropriately.
04.09 Identify laws relating to employment.

05.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS -- The student will be able to:

05.06 Identify health careers related to the integumentary system.
05.12 Identify careers related to the muscular/skeletal systems.
05.18 Identify health careers related to the respiratory system.
05.22 Identify health careers related to the nervous system and sensory organs.
05.26 Identify health careers related to the urinary system.
05.30 Identify health careers related to the reproductive systems.
05.34 Identify health careers related to the digestive system, including dental and dietetic occupations.
05.38 Identify health careers related to the circulatory system.
05.42 Identify Health Careers related to the endocrine system.

06.0 SUCCESSFULLY COMPLETE CLINICAL LEARNING EXPERIENCES BY DEMONSTRATING COMPETENCY OF SELECTED OCCUPATIONAL SKILLS REPRESENTATIVE OF MAJOR AREAS OF HEALTH CARE -- The student will be able to:

06.01 Perform skills appropriate to each body system.
06.02 Complete clinical rotations representing selected health career clusters using skills learned in outcome 01.0.
06.03 Demonstrate interpersonal relationship, self discipline, dependability.
06.04 Perform skills in first aid and CPR

07.0 IDENTIFY AT LEAST ONE HEALTH CAREER WHICH MEETS PERSONAL GOALS -- The student will be able to:

07.01 Examine the requirements of workers in the major health career

clusters.
07.02 Compare personal qualities and aptitudes with requirements of selected careers.
07.03 Investigate other health careers not related directly in body systems such as, but not limited to, hospital administration, biomedical technologies, marketing, public relations, environmental services, and other support services.
07.04 Decide which health career, if any, meets his/her personal career goals.

08.0 SELECT HEALTH CARE SERVICES IN KEEPING WITH ACCEPTED CONSUMER PRACTICES -- The student will be able to:

08.01 Demonstrate ability to investigate and select qualified health care practitioners and providers.
08.02 Identify and compare components of available health insurance plans.
08.03 Demonstrate knowledge of therapeutic uses and misuses of over the counter drugs.
08.04 Identify and recognize services of available community agencies.

09.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE CLINICAL SETTINGS -- The student will be able to:

09.01 Describe the concept of positive self concepts.
09.02 Identify basic human needs according to Maslow's theory.
09.03 Describe and demonstrate appropriate behavior.
09.04 Recognize multicultural behavior differences.

10.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN CLINICAL SETTINGS -- The student will be able to:

10.01 Demonstrate safe use, care and maintenance of equipment and materials.
10.02 Practice safe transport and transfer of patients.
10.03 Properly identify patients.
10.04 Follow approved clinical procedures for labeling.
10.05 Use good observational skills and report appropriately.
10.06 Recognize and report signs of abuse and neglect.
10.07 Follow emergency procedures as outlined by instruction.
10.08 Identify and perform skills related to "Universal Precautions".

11.0 DEMONSTRATE KNOWLEDGE OF ETHICAL BEHAVIOR AND LEGAL ASPECTS OF HEALTH CARE IN CLINICAL SETTINGS -- The student will be able to:

11.01 Recognize lines of authority and responsibility of health care workers.
11.02 Identify patient rights and responsibilities.
11.03 Identify legal ramifications of actions/inactions in the clinical settings.
11.04 Describe current laws affecting health care.

12.0 IDENTIFY THE CHARACTERISTICS AND COMPONENTS OF THE HEALTH CARE DELIVERY SYSTEMS -- The student will be able to:

12.01 Identify the basic components of the health care delivery system.
12.02 Describe the types of health care and identify the major types of health care facilities.
12.03 Identify health care planning agencies and services available at local, state, national and international levels.
12.04 Identify the major events that transformed health care.
12.05 Identify current developments which will affect health care.

13.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.

13.02 Identify community resources and services available to the victims of immune-deficiency diseases.

13.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.

13.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Center for Disease Control (CDC) guidelines.

13.05 Demonstrate knowledge of the legal aspects of AIDS.

14.0 DEMONSTRATE COMPUTER LITERACY AND COMPUTATIONAL SKILLS -- The student will be able to:

14.01 Define terms and demonstrate an understanding of concepts related to computers.

14.02 Describe the uses of computers in the health occupation being studied.

14.03 Demonstrate computational skills relevant to job requirements of the health occupation being studied.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Health Services Management

CODE NUMBER: Secondary _______ Postsecondary ______

Florida CIP 0318.070100

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other ______________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as medicine and health services managers, other (15008019), or health service administrators or to provide supplemental training for persons previously or currently employed in these occupations.

Two options are offered:

OPTION I is a generic program to prepare health service managers.

OPTION II is a program designed for students who already have occupation background and/or credentials in the health field to become managers within their specified discipline.

The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, principles of management, introduction to computer literacy, health care organization, medical ethics, legal aspects, and advanced technical skills in a chosen health-related profession, Health and Safety, and CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The curriculum content must include, courses in management, accounting and bookkeeping, personnel relations and management, governmental standards and regulation of health care administration (including nursing administration and patient care).

The theory base is built upon supportive courses available to students in the community college setting. Such courses shall include, but not be limited to, communication, social science, business mathematics and computer application.

II. LABORATORY ACTIVITIES: Clinical learning, if required, shall be provided in the health care setting that will meet the learning objectives and will be most comparable to the students' future area of employment.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

OPTION I: Programs must be approved by the Florida Board of Examiners of Nursing Home Administrators for graduates to be eligible to take the state licensure examination to become a nursing home administrator.

Graduates are eligible to take the National Administrators Board examination and the State Board licensing examination for licensure as a nursing home administrator in the State of Florida.

OPTION II: The program parameters contain a minimum of 15 credit hours of general education, a minimum of 15 credit hours of management or health-related managerial courses, and courses in health related areas.

The typical length of this program is an associate degree.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate leadership and administrative skills basic to management in any health care facility.
02. Interpret federal, state and local laws as they apply to health care facilities.
03. Demonstrate knowledge of operational and organizational structures of health care facilities.
04. Demonstrate employability skills.
05. Demonstrate knowledge of psychological problems among residents and find acceptable solution.
06. Demonstrate knowledge of materials and supplies needed to care for residents and how to obtain them for staff.
07. Demonstrate knowledge of occupational safety and health for residents and employees.
08. Demonstrate knowledge of appropriate work-loads for each employee and knowledge of the amount of care each resident requires.
09. Review, approve and monitor departmental capital and operational budgets.
10. Identify and apply legal reimbursement systems.
11. Comply with accreditation standards of governmental or governmental appointed agencies/organization.
12. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

OPTION II ONLY:

13. Demonstrate an understanding of technical competencies from one or more specialized health care areas.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Health Services Management POSTSECONDARY NUMBER: 0318.070100

01.0 DEMONSTRATE LEADERSHIP AND ADMINISTRATIVE SKILLS BASIC TO MANAGEMENT IN ANY HEALTH CARE FACILITY -- The student will be able to:

01.01 Describe the American Health Care Delivery System, its scope and the organizational climate that serves as the setting and framework for managing health care organizations.
01.02 Identify current trends and perspectives related to the management of health care organizations and the means by which the application of sound management principles and behavior can facilitate change.
01.03 Interpret managerial principles, practices and processes to the delivery of health care.
01.04 Identify the role, responsibilities and parameters for the various levels of management within the health care organizations.
01.05 State the control processes and techniques used to ensure that the objectives, strategies and policies of health care delivery are achieved effectively and efficiently.
01.06 Relate the various aspects of organizational dynamics (decisions making, motivations, leadership, and communication) to the needs and problems of health care organizations.
01.07 Relate personnel administration practices to the total scope of labor relations, including manpower acquisition, maintenance, and utilization.

02.0 INTERPRET FEDERAL, STATE AND LOCAL LAWS AS THEY APPLY TO HEALTH CARE FACILITIES -- The student will be able to:

02.01 Cite Federal, State and local institutional requirements.
02.02 List required standards and procedures for facility and staff.
02.03 Identify mandatory requirements regarding environmental health and safety standards.
02.04 Discuss the impact of legislative changes on health care facilities.
02.05 Identify the Florida Statutes as applied to health care facilities.

03.0 DEMONSTRATE KNOWLEDGE OF OPERATIONAL AND ORGANIZATIONAL STRUCTURES OF HEALTH CARE FACILITIES -- The student will be able to:

03.01 Describe the functions and standards of departments in health care facilities.
03.02 Contrast administrative roles and responsibilities in different types of health care agencies.
03.03 Describe principles and philosophies of health care agencies delivering long-term, acute and other types of health care services.
03.04 Identify several basic principles of medical care.
03.05 State communication techniques within the health care system.
03.06 Utilize the state of the art language when delivering health care services to the ill and/or elderly.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from

employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 DEMONSTRATE KNOWLEDGE OF PSYCHOLOGICAL PROBLEMS AMONG RESIDENTS AND FIND ACCEPTABLE SOLUTION -- The student will be able to:

05.01 Recognize the worth and dignity of each resident.
05.02 Accomodate individual differences, characteristics, and behaviors.
05.03 Adjust room assignments, personnel assignments, etc., to satisfy residents.

06.0 DEMONSTRATE KNOWLEDGE OF MATERIALS AND SUPPLIES NEEDED TO CARE FOR RESIDENTS AND HOW TO OBTAIN THEM FOR STAFF -- The student will be able to:

06.01 Evaluate current inventory.
06.02 Prepare purchase order, being mindful of current financial status of institution.
06.03 Shop for quality, price, and quantity.

07.0 DEMONSTRATE KNOWLEDGE OF OCCUPATIONAL SAFETY AND HEALTH FOR RESIDENTS AND EMPLOYEES -- The student will be able to:

07.01 Prepare an evacuation plan.
07.02 Plan and conduct fire drills making sure that every person on duty is aware of their individual responsibility.
07.03 Inspect labels on hazardous substances including poison labels.
07.04 Make certain that all substances have appropriate storage areas.
07.05 Conduct inservice for employees.
07.06 Respond to workers inquiries and post notices.

08.0 DEMONSTRATE KNOWLEDGE OF APPROPRIATE WORK-LOADS FOR EACH EMPLOYEE AND KNOWLEDGE OF THE AMOUNT OF CARE EACH RESIDENT REQUIRES -- The student will be able to:

08.01 Prepare job descriptions.
08.02 Prepare care plans for each resident.
08.03 Figure man-hours required for total care on one unit using available statistics.
08.04 Identify factors which alter the amount of care needed and the number of man-hours required for different diagnoses.

09.0 REVIEW, APPROVE AND MONITOR DEPARTMENTAL CAPITAL AND OPERATIONAL BUDGETS -- The student will be able to:

09.01 Develop a capital budget justification format.
09.02 Delegate capital budget preparation to key managers.
09.03 Analyze and approve appropriate capital budget items.
09.04 Develop an operational budget format.
09.05 Analyze and approve appropriate financial levels in each operational budget.

10.0 IDENTIFY AND APPLY LEGAL REIMBURSEMENT SYSTEMS -- The student will be able to:

10.01 Establish a patient classification system within a health care facility.
10.02 Establish a mechanism for utilization review.
10.03 Develop an accounts receivable system which monitors and optimizes reimbursement.

11.0 COMPLY WITH ACCREDITATION STANDARDS OF GOVERNMENTAL OR GOVERNMENTAL APPOINTED AGENCIES/ORGANIZATION -- The student will be able to:

11.01 List and implement procedures to meet required standards for health care facilities.
11.02 Identify the required standards for health care personnel.
11.03 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
11.04 Develop policies and operational procedures to meet required standards.
11.05 Establish liason mechanisms with appropriate accreditating organizations.

12.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

12.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
12.02 Identify community resources and services available to the victims of immune-deficiency diseases.
12.03 Identify at risk behaviors which promote the spread of AIDS and public education necessary to combat the spread
12.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
12.05 Demonstrate knowledge of the legal aspects of AIDS.

13.0 DEMONSTRATE AN UNDERSTANDING OF TECHNICAL COMPENTENCIES FROM ONE OR MORE SPECIALIZED HEALTH CARE AREAS -- The student will be able to:

13.01 Demonstrate an understanding of technical competencies as specified in the curriculum frameworks of any health occupations postsecondary adult or postsecondary vocational program.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Health Unit Coordinator

CODE NUMBER: Secondary 8415200 Postsecondary H170513

Florida CIP 0317.051300

SECONDARY SCHOOL CREDITS 3 COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

✓ Postsecondary Vocational X Other 10-12, 30, 31

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE @7 G TEC MED @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as ward clerks (245.362-014) or health unit coordinators or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work practices, clerical skills, safety and security use of computers, interpretation and transcription of doctors' orders, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8415210	Health Unit Coordinator 1
8415220	Health Unit Coordinator 2
8415230	Health Unit Coordinator 3

II. LABORATORY ACTIVITIES: Transcription of physicians' orders is an integral part of this course. This competency is achieved through simulated practice with standard equipment and supplies used in a health care facility by the health unit coordinator. An overview of anatomy and physiology serves as a foundation for medical terminology and CPR/Heartsaver/first aid. A working knowledge of the computer is a competency achieved through actual practice. Role playing is one of the methods which can be used for developing interpersonal skills.

Clinical learning experiences are an integral part of this program.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization as well a participation in a career related professional organization(s) for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

It is recommended that completers of this program voluntarily take the National Association of Health Unit Coordinators Certification examination which is offered annually.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 10.0, and Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 450 hours.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Apply basic math skills.
02. Apply basic scientific competencies.
03. Demonstrate Communication skills.
04. Demonstrate employability skills.
05. Interpret and apply medical terminology.
06. Demonstrate legal and ethical behaviors.
07. Organize and maintain efficient work practices.
08. Perform clerical duties.
09. Practice safety/security.
10. Operate computers.
11. Read, interpret and transcribe physicians' orders.
12. Use interpersonal skills effectively.
13. Demonstrate knowledge of Immune-Deficiency Diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8415200
PROGRAM TITLE: Health Unit Coordinator POSTSECONDARY NUMBER: H170513

01.0 APPLY BASIC MATH SKILLS -- The student will be able to:

01.01 Record graphs, charts and tables.
01.02 Make and use measurements in both traditional and metric units.
01.03 Convert from regular to 24 hour time.

02.0 APPLY BASIC SCIENTIFIC COMPENTENCIES -- The student will be able to:

02.01 Demonstrate ability to evaluate and draw conclusions.
02.02 Demonstrate knowledge of anatomy and physiology of body systems.

03.0 DEMONSTRATE COMMUNICATION SKILLS -- The student will be able to:

03.01 Distinguish between personal opinion and factual reports on patient charts.
03.02 Transmit information in oral and written form.
03.03 Translate signs, symbols, and abbreviations commonly used in health care facilities.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application correctly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY -- The student will be able to:

05.01 Identify components of medical terms.
05.02 Spell, pronounce and define medical terms.
05.03 Relate medical terminology to the body systems.
05.04 Identify and define standard abbreviations and medical symbols.
05.05 Identify apothecary and metric systems.

06.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIORS -- The student will be able to:

06.01 Explain the patients' "Bill of Rights".
06.02 Identify legal and ethical principles regarding the patients' charts, correcting errors, confidentiality, transcribing, patient contact and job description.
06.03 Identify and follow hospital policies.
06.04 Demonstrate knowledge of Center for Disease Control (CDC) guidelines as it applies to infection control.
06.05 Identify the components of the National Association of Health Unit Coordinator's "Code of Ethics."

07.0 ORGANIZE AND MAINTAIN EFFICIENT WORK PRACTICES -- The student will be able to:

07.01 Arrange daily activities by priority.
07.02 Prepare and post unit information lists.
07.03 Maintain a supply of assembled medical/surgical admission packets.
07.04 Assemble/disassemble addressograph plate.
07.05 Distribute forms and articles from in-basket.

07.06 Identify, store and maintain unit equipment/supplies in a neat and orderly manner.
07.07 Sanitize nursing station equipment.

08.0 PERFORM CLERICAL DUTIES -- The student will be able to:

08.01 Record patients allergies.
08.02 Prepare and add forms to chart.
08.03 Record vital signs and patient information.
08.04 Prepare patients' admission chart.
08.05 Record admission data on unit records.
08.06 Prepare discharge chart for medical records.
08.07 Obtain previous admission records/X-rays.
08.08 Post all reports on charts.
08.09 File and retrieve assorted forms.
08.10 Perform patient admission, transfer and discharge procedures.

09.0 PRACTICE SAFETY/SECURITY -- The student will be able to:

09.01 Participate in emergency or disaster plan, CPR and first aid.
09.02 Initiate codes upon nurse's directions.
09.03 Report safety hazards.
09.04 Identify institution's security policies/procedures.
09.05 Practice good body mechanics as they apply to job duties.

10.0 OPERATE COMPUTERS -- The student will be able to:

10.01 Sign on to computers.
10.02 Enter data/computer code.
10.03 Correct mistakes.
10.04 Use back-up system.
10.05 Call up information stored in computer.

11.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS -- The student will be able to:

11.01 Identify all types of physician's orders.
11.02 Prioritize orders for transcription.
11.03 Prepare and route requisitions manually or via computer.
11.04 Arrange for ordered consultations.
11.05 Schedule patients' treatments or therapy with other hospital departments.

12.0 USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

12.01 Accept and place telephone calls and relay messages.
12.02 Greet and direct professionals and visitors.
12.03 Operate communication systems.
12.04 Maintain a professional appearance by practicing good hygiene and adhering to dress code.
12.05 Adapt to changing conditions.
12.06 Use courtesy, tact, patience and assertiveness techniques in role playing situations.
12.07 Explain unit activities to on-coming staff.
12.08 Identify and use different methods of communication.
12.09 Identify and use "chain of command" in an institution/agency.

13.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
13.02 Identify community resources and services available to the victims of immune-deficiency diseases.
13.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of

immune-deficiency diseases.

13.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

13.05 Demonstrate knowledge of the legal aspects of AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health COURSE CREDIT: 1
PROGRAM TITLE: Health Unit Coordinator PROGRAM NUMBER: 8415200
COURSE TITLE: Health Unit Coordinator 1 COURSE NUMBER: 8415210

COURSE DESCRIPTION: This course introduces students to the basic activities and learning needs of the health unit coordinator. The content includes but is not limited to medical terminology, ethics, interpersonal relationships, communications, and employability skills.

02.0 APPLY BASIC SCIENTIFIC COMPETENCIES -- The student will be able to:

02.01 Demonstrate ability to evaluate and draw conclusions.
02.02 Demonstrate knowledge of anatomy and physiology of body systems.

03.0 DEMONSTRATE COMMUNICATION SKILLS -- The student will be able to:

03.01 Distinguish between personal opinion and factual reports on patient charts.
03.02 Transmit information in oral and written form.
03.03 Translate signs, symbols, and abbreviations commonly used in health care facilities.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application correctly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY -- The student will be able to:

05.01 Identify components of medical terms.
05.02 Spell, pronounce and define medical terms.
05.03 Relate medical terminology to the body systems.
05.04 Identify and define standard abbreviations and medical symbols.
05.05 Identify apothecary and metric systems.

06.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIORS -- The student will be able to:

06.01 Explain the patients' "Bill of Rights".
06.02 Identify legal and ethical principles regarding the patients' charts, correcting errors, confidentiality, transcribing, patient contact and job description.
06.03 Identify and follow hospital policies.
06.04 Demonstrate knowledge of Center for Disease Control Guidelines as they apply to infection control.
06.05 Identify the components of the National Association of Health Unit Coordinator's "Code of Ethics."

12.0 DEMONSTRATE ABILITY TO USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

12.01 Accept and place telephone calls and relay messages.
12.02 Greet and direct professionals and visitors.
12.03 Operate communication systems.
12.04 Maintain a professional appearance by practicing good hygiene

and adhering to dress code.

12.05 Adapt to changing conditions.

12.06 Use courtesy, tact, patience and assertiveness techniques in role playing situations.

12.07 Explain unit activities to on-coming staff.

12.08 Identify and use different methods of communication.

12.09 Identify and use "chain of command" in an institution/agency.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health COURSE CREDIT: 1

PROGRAM TITLE: Health Unit Coordinator PROGRAM NUMBER: 8415200

COURSE TITLE: Health Unit Coordinator 2 COURSE NUMBER: 8415220

COURSE DESCRIPTION: This course allows the students to develop clerical skills that are necessary to function as a health unit coordinator. The content includes computer communications, preparation of various requisition forms and lists, transcription of various types of physicians orders and maintenance of the patients chart.

01.0 APPLY BASIC MATH SKILLS--The student will be able to:

01.01 Record graphs, charts, and tables.
01.02 Make and use measurements in both traditional and metric units.
01.03 Convert from regular to 24 hour time.

07.0 ORGANIZE AND MAINTAIN THE WORKING ENVIRONMENT --The student will be able to:

07.01 Arrange daily activities by priority.
07.02 Prepare and post unit information lists.
07.03 Maintain a supply of assembled medical/surgical admission packets.
07.04 Assemble/disassemble addressograph plate.
07.05 Distribute forms and articles from in-basket.
07.06 Identify, store and maintain unit equipment/supplies in a neat and orderly manner.
07.07 Sanitize nursing station equipment.

08.0 PERFORM CLERICAL DUTIES--The student will be able to:

08.01 Record patients allergies.
08.02 Prepare and add forms to chart.
08.03 Record vital signs and patient information.
08.04 Prepare patients' admission chart.
08.05 Record admission data on unit records.
08.06 Prepare discharge chart for medical records.
08.07 Obtain previous admission records/X-rays.
08.08 Post all reports on chart.
08.09 File and retrieve assorted forms.
08.10 Perform patient admission, transfer and discharge procedures.

11.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS --The student will be able to:

11.01 Identify all types of physician's orders.
11.02 Prioritize orders for transcription.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health COURSE CREDIT: 1

PROGRAM TITLE: Health Unit Coordinator PROGRAM NUMBER: 8415200

COURSE TITLE: Health Unit Coordinator 3 COURSE NUMBER: 8415230

COURSE DESCRIPTION: This course allows the students to practice skills in the actual clinical settings under the supervision of the teacher utilizing written contractual agreements with health care agencies.

09.0 PRACTICE SAFETY/SECURITY -- The student will be able to:

09.01 Participate in emergency or disaster plan, CPR and first aid.
09.02 Initiate codes upon nurse's directions.
09.03 Report safety hazards.
09.04 Identify institution's security policies/procedures.
09.05 Practice good body mechanics as they apply to job duties.

10.0 USE COMPUTERS -- The student will be able to:

10.01 Sign on to computers.
10.02 Enter data/computer code.
10.03 Correct mistakes.
10.04 Use back-up system.
10.05 Call up information stored in computer.

11.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS -- The student will be able to:

11.03 Prepare and route requisitions manually or via computer.
11.04 Arrange for ordered consultations.
11.05 Schedule patients' treatments or therapy with other hospital departments.

13.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
13.02 Identify community resources and services available to the victims of immune-deficiency diseases.
13.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
13.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
13.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Hearing Aid Dispensing

CODE NUMBER: Secondary ______ Postsecondary H170820

Florida CIP 0317.082000

SECONDARY SCHOOL CREDITS ____ COLLEGE CREDITS ____ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational ______ Other 30, 31

CERTIFICATION COVERAGE: HEARAID SP @7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as audiometrists, hearing aid repairers (719.381-014), hearing aid technicians (32199227), (276.354-010), or to provide supplemental training for persons previously or currently employed in these occupations. The program should be approved by the Florida Board of Hearing Aid Specialists so that the graduates will be able to take the state licensing examination administered by the Department of Professional Regulation under current Florida Statutes 484.0401-059.

Content should include the science of sound, normal and abnormal hearing functions, anatomy and physiology of the ear, major causes and patterns of hearing impairment, speech and audiometric testing, psychological counseling of the hearing impaired person, recordkeeping, patient audiological assessment, ethics and legal implications of hearing aid practice, office procedures, employability skills, leadership and human relations, health and safety including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this program. Clinical experience is required.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The Board of Hearing Aid Specialists recognizes apprenticeship training programs for this occupation. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0, and Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific

program or course articulation agreements with each other. The typical length of this program for the average achieving student is 450 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Perform audiometric testing by air and bone conduction using effective masking.
02. Determine type and degree of hearing loss.
03. Determine speech reception threshold, speech discrimination, sound tolerance level, best ear.
04. Select appropriate hearing aid.
05. Make impressions.
06. Use appropriate techniques to fit a hearing aid.
07. Demonstrate knowledge of legal provisions and ethical behavior of health care workers.
08. Demonstrate employability skills.
09. Demonstrate an Understanding of Entrepreneurship.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: _______

PROGRAM TITLE: Hearing Aid Dispensing POSTSECONDARY NUMBER: H170820

01.0 PERFORM AUDIOMETRIC TESTING BY AIR AND BONE USING EFFECTIVE MASKING -- The student will be able to:

01.01 Describe how often an audiometer shall be checked for calibration electro-acoustically or calibrated.
01.02 Maintain evidence (records) of satisfactory calibration of audiometers.
01.03 Describe the requirements of the audiometric testing room and list the sound-pressure levels at the specified frequencies.
01.04 Obtain a waiver from a client if needed.
01.05 List the records and charts which must be kept on each individual.
01.06 Perform audiometric tests using effective masking by air and bone conduction.
01.07 Use a pure tone audiometer which meets the specifications of the American National Standards Institute for diagnostic audiometers.
01.08 Describe the instruments, procedures and interpretation of test results.
01.09 Discuss all aspects of communication and interpersonal relationships with special interpretation for dealing with the hearing impaired.
01.10 Use sign language.

02.0 DETERMINE TYPE AND DEGREE OF HEARING LOSS -- The student will be able to:

02.01 List the types of deafness.
02.02 Discuss the psychoacoustical and physical concepts and principles of sound and the human auditory system.
02.03 List the major causes and patterns of hearing impairment.
02.04 Explain the physiology of hearing.

03.0 DETERMINE SPEECH RECEPTION THRESHOLD, SPEECH DISCRIMINATION, SOUND TOLERANCE LEVEL, BEST EAR -- The student will be able to:

03.01 Use a speech audiometer or a master hearing aid to determine most comfortable listening level and the most uncomfortable listening level and determine client's speech discrimination at the most comfortable loudness level.
03.02 Explain the following terms: intensity, loudness, frequency and pitch.
03.03 Define speech reception threshold and speech discrimination.

04.0 SELECT APPROPRIATE HEARING AID -- The student will be able to:

04.01 From among a selection of hearing aid models select best hearing aid for client.
04.02 Determine that the selected instrument will best compensate for the degree of loss and tolerance level and provide a frequency amplification curve that will give the best speech discrimination possible.
04.03 Interpret manufacturer's specifications and hearing aid analysis data to determine if the hearing aid meets specifications and is appropriate for the client's loss.
04.04 Describe a final fitting and perform final fitting in the presence of a licensed dispenser.

05.0 MAKE IMPRESSIONS -- The student will be able to:

05.01 Make an earmold impression and perform modifications.

05.02 List the materials used for earmolds.
05.03 Demonstrate knowledge of pressure points and their elimination.
05.04 Describe the anatomy of the ear and tell the function of each part.
05.05 Demonstrate type of earmold to be ordered in relation to hearing loss.

06.0 USE APPROPRIATE TECHNIQUES TO FIT A HEARING AID -- The student will be able to:

06.01 Assess the audiological workup.
06.02 Discuss the physical, mental, psychological, occupational and environmental motivation aspects of the hearing impaired person.
06.03 Using a client's earmold, modify the earmold to fit the patient's ear and/or change hearing aid response.
06.04 Explain the bilateral fitting of hearing aids.
06.05 Demonstrate use of otoscope.
06.06 Give a report indicating type of disorder found which must be reported to physician.

07.0 DEMONSTRATE KNOWLEDGE OF LEGAL PROVISIONS AND ETHICAL BEHAVIOR OF HEALTH CARE WORKERS -- The student will be able to:

07.01 State the legal definition of a hearing aid specialist and list the requirements for licensure by examination.
07.02 Discuss unethical practices and list consequences of same.
07.03 Describe client conditions for which a physician must be consulted before fitting a hearing aid.
07.04 Counsel clients and family.
07.05 Describe the legislative intent of Chapter 484 F.S.
07.06 List the acts which constitute grounds for disciplinary proceedings of licensed hearing aid dispensers.
07.07 List the characteristics of an acceptable Hearing Aid specialist and describe their relationship with audiologists, speech pathologists, and physicians.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

08.01 Conduct a job search.
08.02 Secure information about a job.
08.03 Identify documents that may be required when applying for a job.
08.04 Complete a job application.
08.05 Demonstrate competence in job interview techniques.
08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
08.07 Identify acceptable work habits.
08.08 Demonstrate knowledge of how to make job changes appropriately.
08.09 Demonstrate acceptable employee health habits.

09.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP -- The student will be able to:

09.01 Define entrepreneurship.
09.02 Describe the importance of entrepreneurship to the American economy.
09.03 List the advantages and disadvantages of business ownership.
09.04 Identify the risks involved in ownership of a business.
09.05 Identify the necessary personal characteristics of a successful entrepreneur.
09.06 Identify the business skills needed to operate a small business efficiently and effectively.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Home Health Aide

CODE NUMBER: Secondary 8418000 Postsecondary H170404

Florida CIP 0317.040400

SECONDARY SCHOOL CREDITS 1 COLLEGE CREDITS ___ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ___ 7-9 ___ 9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 11-12, 30, 31

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE @7 G

I. MAJOR CONCEPTS/CONTENT: This program is designed to prepare students for employment as home attendant, or home health aide (66011456), (354.377-014), or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, instruction in those supportive services that are required to provide and maintain bodily and emotional comfort and to assist the patient toward independent living in a safe environment, as stated in Rules of the Department of Health and Rehabilitative Services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies. Additional content areas to be included are: legal and ethical responsibilities; communication skills; basic human needs; a safe, clean, and healthy home environment; the developmental process; nutritional needs; emergency care; personal care; special care and rehabilitation needs of the client; household management; record-keeping; pet-facilitated therapy; and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job-preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Basic infection control, first aid, cardio-pulmonary resuscitation (CPR)--heart saver level, vital signs, home-care skills and client-care skills are integral parts of this program. Clinical experiences, where the student may practice, demonstrate and perform the procedures associated with bedside client care, are an appropriate part of this program.

III. SPECIAL NOTE: Section 10D 68.014 Home Health Aide, Administrative Rules, Department of Health and Rehabilitative Services contain much valuable information for program planning. These rules require that if the Home Health Aide receives training through a vocational school where professional standards have been established in accordance with the State Board of Education, a certificate of successful completion shall be on file with the employer.

The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership-training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, a training plan, which includes the instructional objectives, the skills and tasks relevant to the chosen career goal, and any equipment that will be used, is required. The plan is to be signed by the student, the instructor, and the employer.

If this program is offered for 450 hours with Section 233.0695 F.S., the minimum basic skills level required for this postsecondary adult vocational program are: Mathematics 8.0, Reading 8.0 and Language 8.0.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical minimum length of this program for an average achieving student is 150 hours.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate application of basic math skills.
02. Demonstrate basic competencies in science.
03. Use verbal and written communication.
04. Demonstrate legal and ethical responsibilities.
05. Provide emergency care.
06. Describe the anatomy and physiology of the human body.
07. Perform physical comfort and safety functions.
08. Provide personal patient care.
09. Perform nursing procedures.
10. Apply principles of nutrition.
11. Provide care for geriatric patients.
12. Apply the principles of infection control.
13. Provide biological, psychological, and social support.
14. Perform supervised management functions, following the patient plan of care.
15. Assist with rehabilitative activities.
16. Perform home health-care services.
17. Demonstrate employability skills.
18. Demonstrate knowledge of the immune-deficiency disease, AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8418000

PROGRAM TITLE: Home Health Aide POSTSECONDARY NUMBER: H170404

01.0 DEMONSTRATE APPLICATION OF BASIC MATH SKILLS -- The student will be able to:

01.01 Draw, read, analyze, and report on graphs, charts, and tables.
01.02 Measure time, temperature, distance, capacity, and weight.
01.03 Make and use measurements in traditional and metric units.
01.04 Make estimates and judge the reasonableness of the result.

02.0 DEMONSTRATE BASIC COMPETENCIES IN SCIENCE -- The student will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Evaluate and draw conclusions.

03.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

03.01 Distinguish between factual reports and personal opinion.
03.02 Identify and use various forms of communication.
03.03 Identify barriers to communication.
03.04 Use basic medical terminology and approved abbreviations.
03.05 Demonstrate effective interpersonal relationships.
03.06 Receive and give oral report of a patient's status.
03.07 Report and record objective, pertinent observations in written or oral form.
03.08 Maintain current documentation.
03.09 Obtain specified data from patient and family.
03.10 Utilize verbal and written information to assist with the patient's plan of care.
03.11 Demonstrate basic computer skills.
03.12 Communicate effectively via telephone (e.g., take messages, give appropriate information, and transfer calls).

04.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

04.01 Demonstrate legal and ethical behavior within the role and scope of home health aide responsibilities.
04.02 Identify the role of each health-care team member.
04.03 Explain the patient's "Bill of Rights."
04.04 Maintain confidentiality of patient information.
04.05 Describe the purpose of the chain of command (i.e., to resolve patient or employee problems).
04.06 Follow policies and procedures affecting the health, safety, and well-being of patients.
04.07 Recognize and report signs and symptoms of abuse and neglect.
04.08 Recognize and report signs of substance abuse.
04.09 Follow legal guidelines in charting.
04.10 Exhibit behavior supporting and promoting residents' rights.

05.0 PROVIDE EMERGENCY CARE -- The student will be able to:

05.01 Perform emergency measures, including CPR (heart saver level) and the management of an obstructed airway.
05.02 Identify emergency evacuation procedures.

06.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY
-- The student will be able to:

06.01 Describe the basic structure and function of body systems.
06.02 Describe the relationships of body systems in providing patient care.

07.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS
-- The student will be able to:

07.01 Care for equipment and supplies.
07.02 Maintain patient units.
07.03 Observe and report patient's behavior daily, including mental awareness.
07.04 Adjust bed and siderails.
07.05 Lift, hold, or transfer a patient, using good body mechanics.
07.06 Transfer patient, using mechanical lifters.
07.07 Turn and position patient.
07.08 Apply protective devices as directed (e.g. vest or belt).
07.09 Apply comfort devices as directed (e.g. footboard, overbed cradle, alternating pressure mattress).
07.10 Assist patient to dangle.
07.11 Assist patient in ambulation, including the use of crutch, cane, or walker.
07.12 Assist patient in using wheelchair.
07.13 Assist patient with care and use of prosthetic/orthotic devices.
07.14 Administer back rub.

08.0 PROVIDE PERSONAL PATIENT CARE -- The student will be able to:

08.01 Give bed bath.
08.02 Assist with shower or tub bath, including use of specialty tubs.
08.03 Assist patient with sink, tub, shower, or bed shampoo.
08.04 Shave patient.
08.05 Groom patient, including hair, skin, foot, and nail care.
08.06 Assist with and/or administer oral hygiene.
08.07 Assist patient with toileting.
08.08 Assist patient to dress.
08.09 Assist patient with meals.

09.0 PERFORM NURSING PROCEDURES -- The student will be able to:

09.01 Make unoccupied/occupied bed.
09.02 Measure and record patient's pulse and respiration.
09.03 Measure and record patient's temperature.
09.04 Assist patient in passive range-of-motion exercises.
09.05 Apply anti-embolic hose.
09.06 Collect, strain, and/or test routine urine specimen.
09.07 Monitor catheter drainage system.
09.08 Monitor fluid intake and output (I&O).
09.09 Observe, record, and report patient's emesis.
09.10 Assist patient with sitz bath.
09.11 Assist with ostomy care.
09.12 Collect stool specimen.

10.0 APPLY PRINCIPLES OF NUTRITION -- The student will be able to:

10.01 Identify nutrients and food groups.
10.02 Explain regional, cultural, and religious food preferences.
10.03 Describe special diets.
10.04 List factors that must be considered when purchasing food.
10.05 Prepare a basic food plan.
10.06 List factors that must be considered when storing food.
10.07 Identify methods of maintaining fluid balance.
10.08 Identify methods of food preparation.

11.0 PROVIDE CARE FOR GERIATRIC PATIENTS -- The student will be able to:

11.01 Identify safety principles, as related to the elderly.
11.02 Describe general characteristics, particular needs, and problems of the elderly.
11.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
11.04 Distinguish between fact and fallacy about the aging process.
11.05 Identify community resources and services available to the elderly.
11.06 Apply Reality Orientation Techniques and Validation Therapy.
11.07 Provide and involve patients in diversional activities.
11.08 Identify common alterations in elderly patient behavior.
11.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

12.0 APPLY THE PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

12.01 Wash hands.
12.02 Provide care for patients with infectious diseases.
12.03 Practice Universal Precautions according to the Centers for Disease Control guidelines.
12.04 Follow isolation procedures with food tray, garments, and other materials.

13.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT -- The student will be able to:

13.01 Identify basic human needs.
13.02 Discuss family roles and their significance to health.
13.03 List community resources for individual and family health.
13.04 Identify components of the grief process.
13.05 Respond to patient and family emotional needs.

14.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE -- The student will be able to:

14.01 Organize patient-care assignments.
14.02 Complete assignments accurately and in a timely manner.

15.0 ASSIST WITH REHABILITATIVE ACTIVITIES -- The student will be able to:

15.01 List the purposes of restorative (rehabilitation) programs.
15.02 Assist patient with specified restorative (rehabilitation) needs.
15.03 Assist patients/residents to reach the optimum level of independence.

16.0 PERFORM HOME HEALTH-CARE SERVICES -- The student will be able to:

16.01 Follow an established work plan with the patient and family.
16.02 Perform patient-related cleaning tasks and laundry.
16.03 Identify methods for medication storage.
16.04 Assist patient with taking self-administered prescribed medication in the home.

17.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

17.01 Conduct a job search.
17.02 Secure information about a job.
17.03 Identify documents that may be required when applying for a job.
17.04 Complete a job application.
17.05 Demonstrate competence in job-interview techniques.
17.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
17.07 Identify acceptable work habits.

17.08 Demonstrate knowledge of how to make job changes appropriately.
17.09 Demonstrate acceptable employee health habits.

18.0 DEMONSTRATE KNOWLEDGE OF THE IMMUNE-DEFICIENCY DISEASE AIDS
-- The student will be able to:

18.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
18.02 Identify community resources and services available to the victims of the immune-deficiency disease AIDS.
18.03 Identify risky behaviors that promote the spread of AIDS and the public education needed to combat its spread.
18.04 Follow the Centers for Disease Control (CDC) guidelines to prevent the spread of AIDS.
18.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993
PROGRAM TITLE: Hospital Admitting Officer
CODE NUMBER: Secondary ______ Postsecondary H170592
Florida CIP 0317.059902

SECONDARY SCHOOL CREDITS ____ COLLEGE CREDITS ____ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____7-9 ____9-12 X Postsecondary Adult Vocational
______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as interviewing clerks except personnel (55332326), hospital admitting officers, hospital admitting clerks, or hospital entrance attendants, outpatient registration workers, emergency registration workers or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, hospital organization, financial aspects of illness, hospital and health insurance, admitting department activities, preparation of admission forms and patient records, securing patient valuables, obtaining general consent signatures, medical terminology, classification of patients by illnesses (DRG's), placing patients according to hospital policy, entering data into a computer, first aid and cardiopulmonary resuscitation (CPR), employability skills, leadership and human relation skills, and health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory experiences are an integral part of this program. Equipment - related operation of a CRT, a plate embosser, and a typewriter should be provided in the classroom setting.

A clinical practicum should be provided.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

Keyboarding and basic computer use skills are prerequisite or corequisite to this program.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for an average achieving student is 300 hours. Competency based principles should be used so that students need not repeat already possessed skills.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. From among rooms available, select the best room assignment for incoming patient.
02. Prepare all forms for new patient including patient identification, chart, insurance forms, addressograph plate, etc.
03. Prepare and execute records forms.
04. Secure consent signatures.
05. Secure patient's valuables.
06. Demonstrate employability skills.
07. Demonstrate ability to enter data into computer.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations SECONDARY NUMBER: _______
PROGRAM TITLE: Hospital Admitting Officer POSTSECONDARY NUMBER: H170592

01.0 FROM AMONG ROOMS AVAILABLE, SELECT THE BEST ROOM ASSIGNMENT FOR INCOMING PATIENT -- The student will be able to:

01.01 Recognize special needs of incoming patient for protection against hospital acquired infections (lowered resistance to infections, more serious consequences from acquired infectious diseases).
01.02 Follow Center for Disease Control (CDC) guidelines for infection control.
01.03 Check diagnosis of patient already in a semi-private or multiple bedroom.
01.04 Determine kind of room desired by physician for incoming patient.
01.05 Reconcile selection with incoming patients space requirements (traction, isolation), classification of illness, insurance.
01.06 Confirm readiness of room selected.
01.07 Recognize importance of first impressions.
01.08 Demonstrate care, concern, acceptance of ill person/family.
01.09 Demonstrate knowledge of legal aspects, medical care and hospital liability.
01.10 Use appropriate communication with patients, families, coworkers.
01.11 Recognize body language signals.
01.12 Recognize that to this new admission, You are the hospital!
01.13 Use medical terminology.
01.14 Acquire assistance if patient condition warrants.
01.15 Recognize and report symptoms of abuse and neglect.
01.16 Notify unit of admission, accompany patient.

02.0 PREPARE ALL FORMS FOR NEW PATIENT INCLUDING PATIENT IDENTIFICATION, CHART, INSURANCE FORMS, ADDRESOGRAPH PLATE, ETC. -- The student will be able to:

02.01 Confirm admission number.
02.02 Prepare patient identification card (addresograph plate or other).
02.03 Prepare patient identification bracelet.
02.04 Prepare chart forms.
02.05 Prepare insurance forms.
02.06 Prepare hospital record forms.
02.07 Follow designated hospital policy for admitting patients.
02.08 Obtain all needed information: name, physician's name, allergies, diagnosis.
02.09 Enter patient data in all required spaces on forms.
02.10 Prepare a master admission sheet.
02.11 Transfer the physician's orders to the receiving unit.

03.0 PREPARE AND EXECUTE RECORDS FORMS -- The student will be able to:

03.01 Prepare master admission sheet (book).
03.02 Place patient name and room number in dietary record.
03.03 Make certain that physician's admitting orders are transferred to receiving unit.
03.04 Place new name on census record.
03.05 Place name on utilization record.

04.0 SECURE CONSENT SIGNATURES -- The student will be able to:

04.01 Identify criteria for the status of legal guardian.
04.02 Read form to patient or guardian.

04.03 Observe and witness patient signature or that of guardian.
04.04 Sign your name on witness space.
04.05 Recognize the kinds of consent forms in use - consent for surgery, consent for anaesthesia, consent for amputation, consent for donation of body parts, consent for autopsy, consent for blood transfusion, consent physician to treat, consent for consultation.
04.06 Recognize stress and deal effectively, courteously and empathetically with patients/families/significant others.

05.0 SECURE PATIENT"S VALUABLES -- The student will be able to:

05.01 Have patient place money (counted) in envelope.
05.02 Have patient remove jewelry, describe, place in envelope.
05.03 Follow hospital policy, rules regarding valuables.
05.04 Record on admitting forms.
05.05 Send bulky valuables and fur coats home or obtain patient's or guardian signature on a "Waiver of Liability" form.

06.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

06.01 Conduct a job search.
06.02 Secure information about a job.
06.03 Identify documents that may be required when applying for a job.
06.04 Complete a job application.
06.05 Demonstrate competence in job interview techniques.
06.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
06.07 Identify acceptable work habits.
06.08 Demonstrate knowledge of how to make job changes appropriately.
06.09 Demonstrate acceptable employee health habits.

07.0 DEMONSTRATE ABILITY TO ENTER DATA INTO COMPUTER -- The student will be able to:

07.01 Turn on computer.
07.02 Insert disk or key in mainframe code.
07.03 Type in data.
07.04 Send data electronically to X-Ray, Lab, O.R., floor, pharmacy.
07.05 Identify the informational requirements on an admission form.

08.0 DETERMINE IF PATIENTS MEET THE FINANCIAL REQUIREMENTS OF AN INSTITUTION -- The student will be ale to:

08.01 Identify types of insurance.
08.02 Calculate deposit amounts.
08.03 Determine if preauthorization is required for admission.

09.0 USE MEDICAL TERMINOLOGY AND RECOGNIZE MANIFESTATIONS OF DIAGNOSED CONDITIONS -- The student will be able to:

09.01 Pronounce, spell, and define medical terminology.
09.02 Recognize manifestations of diagnosed conditions.
09.03 Identify alternate processing methods.
09.04 Explain the ICD 9cm coding system.

10.0 DEMONSTRATE INTERPERSONAL SKILLS -- The student will be able to:

10.01 Communicate with patients, co-workers, and authority figures using verbal and non-verbal communication skills.
10.02 Demonstrate courtesy, care, concern, and acceptance of ill persons and their families.
10.03 Explain the importance of first impressions.
10.04 Identify body language signals.
10.05 Identify symptoms of stress.
10.06 Display professional, respectful behavior with authority figures.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Hospital Housekeeping Supervision

CODE NUMBER: Secondary ______ Postsecondary H170599

Florida CIP 0317.059901

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____7-9 _____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: NURSING ED @ 5 PRAC NURSE @ 7 G TEC MED @ 7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as hospital housekeeping supervisor (61008403), (187.167-046), hospital housekeepers or hospital environmental services managers or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, maintenance of housekeeping supplies and equipment, housekeeping techniques, personnel management, purchasing and budgeting, interior design, landscaping, computer science, safety and security, occupational safety and health act, theories of supervision, theories of learning, nutrition, microbiology, economics, technical writing, english, foreign language, mathematics, sociology, psychology, speech, legal requirement skills, health and safety including CPR, Heartsaver and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Classroom laboratory experiences are an integral part of this program. Clinical practicums/internships should be utilized.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization as well as participation in a career related professional organization(s) for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

This program should be approved by the National Executive Housekeepers Association, Inc. This association maintains an affiliate professional organization for teachers and students and a patron club for vendors. Vendors often supply valuable new instructional materials and audio visuals for loan. The Florida Association of Hospital Housekeepers is sponsored by the Florida Hospital Association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0, and Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 360 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Organize and maintain supplies and equipment.
02. Manage housekeeping equipment.
03. Care for and distribute laundry.
04. Perform housekeeping activities.
05. Care for the cleaning and maintenance of horizontal and vertical surfaces within hospital.
06. Identify chemicals and their proper use.
07. Demonstrate safety, security and sanitation skills.
08. Describe joint commission accreditation of hospitals (JCAH) requirements, Florida's Right to Know Law, Hazardous Waste Disposal and local ordinances regarding the Environmental Services Department.
09. Delegate responsibilities, direct employees and follow-up on task completion.
10. Demonstrate techniques of scheduling from gathered data, design "day off" roster, and determine necessary FTE staff level for assigned responsibilities.
11. Design training programs for all levels of employees with scheduled retraining annually, using audio-visual instruction tools that are available.
12. Design, develop and install computer programs for operational activities, cost containment data, and project for future activities.
13. Demonstrate inter-department skills.
14. Demonstrate employability skills.
15. Demonstrate knowledge of immune-deficiency diseases, including AIDS.
16. Use verbal and written skills.
17. Apply basic math skills.
18. Apply basic science skills.

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations — SECONDARY NUMBER:

PROGRAM TITLE: Hospital Housekeeping Supervision — POSTSECONDARY NUMBER: H170599

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:
01.01 Identify and use various forms of communication.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Maintain current documentation.
01.06 Demonstrate proper telephone usage.
01.07 Demonstrate basic computer skills.
01.08 Demonstrate effective teamwork as a member of a team.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Make estimates and approximations and judge the reasonableness of the result.
02.02 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Demonstrate ability to evaluate and draw conclusions.
03.02 Apply infection control techniques following center for Disease Control (CDC) guidelines.
03.03 Apply the principles of medical/surgical asepsis.

04.0 ORGANIZE AND MAINTAIN SUPPLIES AND EQUIPMENT -- The student will be able to:

04.01 Organize storage area.
04.02 Stock "maintain" cart with supplies and equipment.
04.03 Maintain janitoral closet.
04.04 Check electrical equipment before using.
04.05 Perform preventative maintenance on heavy duty cleaning equipment.
04.06 Operate each piece of equipment.
04.07 Clean heavy duty equipment before returning to storage area.

05.0 MANAGE HOUSEKEEPING EQUIPMENT -- The student will be able to:

05.01 Develop a training program and desired outcome on each piece of equipment within the hospital.
05.02 Develop retraining program, with proper recordkeeping of the employee's activities in this area.
05.03 Maintain a minimum inventory of recommended spare parts on all equipment for minor repair.
05.04 Develop and maintain schedule of renewals and repairs on all equipment.
05.05 Identify developments of new equipment.

06.0 CARE FOR AND DISTRIBUTE LAUNDRY -- The student will be able to:

06.01 Check quality control.
06.02 Avoid wasteful habits.
06.03 Utilize distribution systems.
06.04 Prevent loss.
06.05 Transport both clean and soiled laundry.

07.0 PERFORM HOUSEKEEPING ACTIVITIES -- The student will be able to:

07.01 Use all carpet shampoo methods.
07.02 Scrub, strip, finish and spray buff hard floor surfaces.

07.03 Mix chemicals as directed on the labels.
07.04 Perform all isolation techniques as instructed.
07.05 Perform daily sweeping, dust mopping, and wet mopping procedures.
07.06 Perform daily cleaning of patient and non-patient areas.
07.07 Perform bed making on check-outs.

08.0 CARE FOR THE CLEANING AND MAINTENANCE OF HORIZONTAL AND VERTICAL SURFACES WITHIN HOSPITAL -- The student will be able to:

08.01 Prepare cleaning techniques for floors, walls, and ceilings, outlining chemicals to be used, tools, and equipment usage and the desired result.
08.02 Develop records as to job completion and necessary schedule to assure of proper cleaning and maintenance.

09.0 IDENTIFY CHEMICALS AND THEIR PROPER USE -- The student will be able to:

09.01 Maintain par level inventory on all cleaning products to be used within the facility.
09.02 Identify each chemical as to its use, dilution level, storage area and replenishment.
09.03 Instruct each employee as to the use of each chemical, safety practices, and product limitations.
09.04 Ensure that each employee has complete knowledge of products as outlined by Florida Right to Know law. Record training activities regarding their statutory requirements.
09.05 Identify new products via information supplied by pertinent periodicals, technical bulletins, and chemical product supplies and manufacturers.
09.06 Work closely with infection control coordinator within the facility as to the use of sanitizing and disinfecting agents. Serve as an active member on the Hospital Infection Control Committee.

10.0 DEMONSTRATE SAFETY, SECURITY AND SANITATION SKILLS -- The student will be able to:

10.01 Use OSHA principles concerning proper dress, usage of electrical equipment, and proper placement of warning signs.
10.02 Identify health hazard situations.
10.03 Define health and wellness.
10.04 Serve as an active member of the Hospital Safety OSHA Management Committee.
10.05 Develop a safety program within the department and appoint a safety monitor to assure proper procedures are adopted and followed.
10.06 Describe local, state, and federal requirements with regard to hazardous waste and their application to the hospital.
10.07 Work closely with the Hospital Control Coordinator regarding sanitation within the facility.
10.08 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
10.09 Ensure that all chemicals, supplies, and equipment are kept in lock and key storage at all times. (This is suggested to avoid improper use of chemicals and equipment and also to be an effective cost control tool.)

11.0 DESCRIBE JOINT COMMISSION ACCREDITATION OF HOSPITALS (JCAH) REQUIREMENTS, FLORIDA'S RIGHT TO KNOW LAW, HAZARDOUS WASTE DISPOSAL AND LOCAL ORDINANCES REGARDING THE ENVIRONMENTAL SERVICES DEPARTMENT -- The student will be able to:

11.01 Obtain a copy of Joint Commission Accreditation of Hospitals (JCAH) requirements for the department and apply these requirements on day to day activities of all employees.
11.02 Describe the requirements of Florida's Right to Know Law and

apply these requirements to the department.

11.03 Obtain information from state, local, and federal agencies regarding Hazardous Waste Disposal and apply these requirements to the department.

11.04 Obtain information from peer group in other hospitals for other local requests.

12.0 DELEGATE RESPONSIBILITIES, DIRECT EMPLOYEES AND FOLLOW-UP ON TASK COMPLETION -- The student will be able to:

12.01 Accomplish mission of department by working through supervisors for expectations of the hospital.

12.02 Use the concept of "Tell them, show them, then tell them again."

12.03 Establish scheduled inspections of all areas within the facility.

13.0 DEMONSTRATE TECHNIQUES OF SCHEDULING FROM GATHERED DATA, DESIGN "DAY OFF" ROSTER, AND DETERMINE NECESSARY FTE STAFF LEVEL FOR ASSIGNED RESPONSIBILITIES -- The student will be able to:

13.01 Document physical inventory of hospital as to patient rooms, corridors, ancilliary areas, support areas, offices, lights, windows, vents and vertical surfaces.

13.02 Determine, by established ward units, what is necessary to complete department responsibilities.

13.03 Decide frequency of cleaning for inspection and write employee schedules from gathered information.

13.04 Determine number of staff necessary for desired levels.

13.05 Design "day off" roster for department.

13.06 Describe the administration responsibilities to perform with the results of 7.01 through 7.05.

13.07 Assign job titles to positions outlined in "day off" roster as to what is to be accomplished. (Example: Floor finishers, vacuum man, mop and buff, Housekeeper I, II or III.)

14.0 DESIGN TRAINING PROGRAM FOR ALLLEVELS OF EMPLOYEES WITH SCHEDULED RETRAINING ANNUALLY, USING AUDIOVISUAL INSTRUCTIONAL TOOLS THAT ARE AVAILABLE -- The student will be able to:

14.01 Determine levels of skills necessary for job classification noted in 7.07 above.

14.02 Establish job descriptions for all positions outlined on "day off" roster.

14.03 Initiate training program for each job description and job title.

14.04 Maintain records of training and schedule retraining annually.

14.05 Gather training tools, audiovisual aids, question and answer exercises from sources available. (Suppliers of chemicals and equipment are an excellent source for these necessary tools.)

15.0 DESIGN, DEVELOP AND INSTALL COMPUTER PROGRAMS FOR OPERATIONAL ACTIVITIES, COST CONTAINMENT DATA, AND PROJECT FOR FUTURE ACTIVITIES -- The student will be able to:

15.01 Determine what information is needed and the time that information is wanted for operation of the department.

15.02 Incorporate into initial program, bases such as room control, work schedules, staff level, days off roster and desired cleaning frequencies.

15.03 Establish levels on all supplies used by departments with cost analysis indicated.

15.04 Develop a project for a cleaning program.

15.05 Design a program for alternative work activities, chemical and supply usage information, and a project schedule for desired results.

15.06 Develop a departmental procedure manual program.

16.0 DEMONSTRATE INTERDEPARTMENT SKILLS -- The student will be able to:

16.01 Maintain daily contact with nursing as to these expectations and prospectives.
16.02 Maintain weekly contact with all other department heads as to their expectations and prospectives.
16.03 Purpose of 10.01 and 10.02 is to keep avenues of communication open and free at all times.
16.04 Participate actively in all hospital social activities.
16.05 Accept suggestions from other department heads and act on them accordingly.

17.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

17.01 Conduct a job search.
17.02 Secure information about a job.
17.03 Identify documents that may be required when applying for a job.
17.04 Complete a job application.
17.05 Demonstrate competence in job interview techniques.
17.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
17.07 Identify acceptable work habits.
17.08 Demonstrate knowledge of how to make job changes appropriately.
17.09 Demonstrate acceptable employee health habits.

18.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASE, INCLUDING AIDS -- The student will be able to:

18.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
18.02 Identify community resources and services available to the victims of immune-deficiency diseases.
18.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
18.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
18.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Human Services

CODE NUMBER: Secondary ______ Postsecondary: ______

Florida CIP 0317.040600

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other ______________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as human services specialists, human services workers, chemical dependence workers, substance abuse workers, or mental health workers, social service technicians (27308108) or to provide supplemental training for persons previously or currently employed in these occupations.

Education Option: Two tracks are offered:

Track I is a generic program to prepare mental health/human services practitioners.

Tract II is a program designed for students who wish to be specially prepared to assist to health those who have abused substances.

The content includes, but is not limited to, personal awareness, history and present status of mental health/human services movement, mental health/human services roles and functions, human growth and development, adaptive and maladaptive patterns of behavior, case management, various treatment modalities, therapeutic interventions, interpersonal communications, assessment, evaluation, abused substances pharmacology, information management, employability skills, health and safety, including CPR.

In accordance with Section 233.0695 F.S. the minimum basic skills grade level required for this postsecondary vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

II. LABORATORY ACTIVITIES: Clinical experiences are provided and may be in the form of practicums, internships, or apprenticeships.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Of special interest to those students in Track II will be obtaining certification by the Certification Board for Addiction Professionals of Florida (CAP and CAAP). National Accreditation is available from The Council for Standards on Human Service Education.

The cooperative method of instruction may be utilized for this program.

Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

Track I: Graduates will be eligible for employment as support personnel in vocational applications which assist toward wholeness those individuals suffering mental health deprivation and/or developmental disability.

Track II: This program builds on the counseling preparation required in Track I and requires education in an historical perspective on substance abuse, substance abuse prevention, the pharmacology of substances which are consciousness altering and subject to abuse, theories of addiction and causes of abuse, case record keeping, methods of intervention, identifying and using appropriate resources, current Federal and State rules and regulations governing the treatment of individuals abusing consciousness altering substances, and the scope and limits ethical expectations in the treatment of individuals abusing consciousness altering substances.

Graduates of the Associate degree in this program should be prepared for the oral and written examinations administered by the Certification Board for Addiction Professionals of Florida.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate personal awareness skills.
02. Demonstrate knowledge of the mental health/human services system and how it affects practice and policy.
03. Demonstrate knowledge of mental health/human service work and the roles of the mental health/human service worker in various settings.
04. Demonstrate knowledge of human development from birth to senescence.
05. Demonstrate knowledge of adaptive and maladaptive patterns of behavior.
06. Demonstrate an understanding of and effective application of various treatment modalities and therapeutic interventions.
07. Demonstrate skills in interpersonal communication with clients, co-workers, and supervisors.
08. Demonstrate assessment, evaluation, problem-solving, and referral and crisis intervention skills.
09. Demonstrate knowledge of legal and ethical issues in practice.
10. Demonstrate skill in information management.
11. Demonstrate employability skills.
12. Provide a safe and healthy environment.
13. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

Track II, in addition to the above:

14. Demonstrate an understanding of the pharmacology of substances which have the effect of altering individual states of consciousness.
15. Demonstrate an understanding of the methods of identifying substance abuse.
16. Demonstrate a knowledge of the theories of addiction and the causes of abuse.

17. Demonstrate a knowledge of the history of substance abuse.
18. Demonstrate an understanding of the Federal and State regulations for the treatment and care of those seeking recovery from substance abuse.
19. Demonstrate an understanding of the ethical requirements and restrictions in treating individuals seeking recovery from substance abuse.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Human Services POSTSECONDARY NUMBER: 0317.040600

01.0 DEMONSTRATE PERSONAL AWARENESS SKILLS -- The student will be able to:

01.01 Use effective self-disclosure.
01.02 Identify and express own feelings congruently.
01.03 Demonstrate verbal responses denoting responsibility for self, ie "I" statements.
01.04 Demonstrate ability to engage in non-defensive self-exploration.
01.05 Assess with accuracy the impact of one's own needs, values, behaviors, motives and limitations on ones self and others.
01.06 Demonstrate genuineness, congruence, empathy, warmth, acceptance and respect.

02.0 DEMONSTRATE KNOWLEDGE OF THE MENTAL HEALTH/HUMAN SERVICES SYSTEM AND HOW IT AFFECTS PRACTICE AND POLICY -- The student will be able to:

02.01 Relate mental health/human service trends, issues, laws and regulations to current practice.
02.02 Describe the Mental Health/Human Services system and tell how it may be accessed.
02.03 Describe the relationship of the Mental Health/Human Services system with the legal system.
02.04 Describe local community resources and referral processes.

03.0 DEMONSTRATE KNOWLEDGE OF MENTAL HEALTH/HUMAN SERVICE WORK AND THE ROLES OF THE MENTAL HEALTH/HUMAN SERVICE WORKER IN VARIOUS SETTINGS -- The student will be able to:

03.01 Describe the role and function of the Mental Health/Human Service workers in inpatient, outpatient and other programs in the service delivery system.
03.02 Describe the role and functions of the potential mental health/human service workers with current and emergency target populations.

04.0 DEMONSTRATE KNOWLEDGE OF HUMAN DEVELOPMENT FROM BIRTH TO SENESCENCE -- The student will be able to:

04.01 Describe each developmental stage and the associated developmental tasks.
04.02 Discuss the application of developmental stages and tasks to the roles and functions of the human service worker in the various delivery systems.

05.0 DEMONSTRATE KNOWLEDGE OF ADAPTIVE AND MALADAPTIVE PATTERNS OF BEHAVIOR -- The student will be able to:

05.01 Demonstrate knowledge of terminology associated with mental disorders.
05.02 Demonstrate knowledge of major diagnostic categories.
05.03 Recognize various levels of adaptive and maladaptive behavior patterns and social functioning.
05.04 Demonstrate understanding of the addictive process and its physical psychological and emotional effects on the dependent individual and affected family.

06.0 DEMONSTRATE AN UNDERSTANDING OF AND EFFECTIVE APPLICATION OF VARIOUS TREATMENT MODALITIES AND THERAPEUTIC INTERVENTIONS -- The student will be able to:

06.01 Identify with accuracy basic assumptions of intervention techniques associated with current major therapeutic approaches.

06.02 Utilize intervention techniques relative to the client and the setting.

06.03 Utilize group intervention techniques relative to group purpose and client population.

06.04 Plan and implement structured group experiences.

06.05 Recognize and assess the degree of severity in a crisis situation and demonstrate crisis intervention skills.

06.06 Demonstrate skills in the development and implementation of case management plans.

06.07 Demonstrate knowledge of psychotropic medications: actions, reactions.

07.0 DEMONSTRATE SKILLS IN INTERPERSONAL COMMUNICATION WITH CLIENTS, CO-WORKERS, AND SUPERVISORS -- The student will be able to:

07.01 Use a one to one relationship with the client based on an understanding of psychodynamics.

07.02 Demonstrate sensitivity to clients' verbal and nonverbal communication.

07.03 Interact with clients in a way which communicates respect for the worth and uniqueness of each client and the clients' right to self-determination.

07.04 Obtain meaningful information leading to an appropriate intervention.

07.05 Establish effective working relationships with staff, supervisors, and community resource personnel.

08.0 DEMONSTRATE ASSESSMENT, EVALUATION, PROBLEM-SOLVING, AND REFERRAL SKILLS -- The student will be able to:

08.01 Describe with accuracy client needs and identify current problems and precipitating events and behavioral consequences.

08.02 Describe with accuracy significant events in the client's personal and social history.

08.03 Demonstrate ability to make accurate observations and related assessments.

08.04 Demonstrate ability to develop, implement and monitor appropriate treatment goals and plans in ongoing or crisis situations.

08.05 Demonstrate ability to develop an appropriate discharge plan.

08.06 Recognize the measurement and assessment techniques used to evaluate intelligence, adaptive behavior, learning problems, affective characteristics.

08.07 Demonstrate recognition of when, where and how to refer clients to other professionals and/or community resources.

09.0 DEMONSTRATE KNOWLEDGE OF LEGAL AND ETHICAL ISSUES IN PRACTICE -- The student will be able to:

09.01 Demonstrate knowledge of issues relating to client confidentiality, self-determination, and client rights and recourse in the mental health/human services delivery system.

09.02 Demonstrate ability to function as a part of the mental health/human service team.

09.03 Demonstrate knowledge of current legislation effecting client care.

09.04 Know and use a professional code of ethics relevant to mental health/human service work.

09.05 Recognize the limits of his/her competence and perform only those functions for which he/she is prepared.

09.06 Recognize the necessity of continued professional development and upgrading of skills.

10.0 DEMONSTRATE SKILL IN INFORMATION MANAGEMENT -- The student will be able to:

10.01 Obtain and record with accuracy intake information.

10.02 Note and report accurate behavioral observation.
10.03 Compile a case summary.
10.04 Compile a psycho-social history.
10.05 Perform accurate record-keeping.
10.06 Present an oral case presentation.
10.07 Evaluate information received re: significance, relevance, timeliness.
10.08 Demonstrate competency in written reporting, charting, logging, etc.
10.09 Describe legal implications of charting and observational notes.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.

12.0 PROVIDE A SAFE AND HEALTHY ENVIRONMENT
-- The student will be able to:

12.01 Demonstrate the capability to attend to maintenance and safety of clients in the mental health/human service delivery system.
12.02 Identify fire/safety hazards.
12.03 Identify emergency and crisis procedures of the mental health/human service agencies for protection of clients and staff.

13.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS
-- The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
13.02 Identify community resources and services available to the victims of immune-deficiency diseases.
13.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
13.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
13.05 Demonstrate knowledge of the legal aspects of AIDS.

14.0 DEMONSTRATE AN UNDERSTANDING OF THE PHARMACOLOGY OF SUBSTANCES WHICH HAVE THE EFFECT OF ALTERING INDIVIDUAL STATES OF CONSCIOUSNESS
-- The student will be able to:

14.01 Identify and describe commonly abused substances.
14.02 List as exhaustively as possible the substances which current research shows to have behavior modifying effects.
14.03 Describe cross-addition.
14.04 Describe drug interactions and drug half-life.
14.05 Identify the basic nutritional needs for a variety of body weights and behavioral activity.
14.06 Identify and describe medical effects of substance abuse not caused by drugs and alcohol.
14.07 Summarize the drug taxonomy.

15.0 DEMONSTRATE AN UNDERSTANDING OF THE METHODS OF IDENTIFYING SUBSTANCE ABUSE -- The student will be able to:

15.01 Infer patterns of progression in substance abuse.
15.02 Distinguish the effects of substance abuse upon special populations including, but not limited to, women, adolescents, minorities according to identifiable populations, the elderly, and the military.
15.03 Assess the ways in which denial is revealed.
15.04 Evaluate the features of effects on family relationship caused by one or more members of the family being involved in substance abuse.
15.05 Explain the causal conditions and process of addiction.
15.06 Discuss the disease concept of alcoholism.
15.07 Discuss the phases of recovery and relapse.
15.08 Use the concept of substance abuse by defining the scope of the problem, discussing socio-cultural aspects of abuse, interpreting the effect of abused substances on the body, and determining the effect of substance abuse on behavior.

16.0 DEMONSTRATE A KNOWLEDGE OF THE THEORIES OF ADDICTION AND THE CAUSES OF ABUSE -- The student will be able to:

16.01 Summarize various factors in substance abuse, including the dynamics of physiological addiction, the dynamics of emotional dependency, and the role of socio-cultural influences on behavior.
16.02 Explain the physical symptoms of substance abuse.
16.03 Explain the social symptoms of substance abuse.
16.04 Summarize the disease concept of behavior modification.
16.05 Summarize the genetic structure concept of behavior determination.
16.06 Summarize the neuro-physiological determinants of behavior.
16.07 Summarize the modes of emotional development in substance abuse.

17.0 DEMONSTRATE AN UNDERSTANDING OF THE HISTORY OF SUBSTANCE ABUSE -- The student will be able to:

17.01 Discuss the changes that have occurred in the Federal and State rules and regulations governing the identification, apprehension, and treatment of substance abusers.
17.02 Compare and contrast the stages of acceptable treatment for substance abusers, beginning in the 18th century to the present.
17.03 Identify and assess the changes in social attitudes toward the use of a variety of abused substances, both in the developed and developing countries of the world.
17.04 Discuss the technological and medical developments that have occurred in most recent treatment of individuals who have abused substances.
17.05 Evaluate the modern developments in the use of synthetic substances to treat normal illness.
17.06 Compare and contrast the psychological theories used to account for addiction.
17.07 Differentiate the psycho-sociological conditions which current perspectives on substance abuse associate with addiction.

18.0 DEMONSTRATE AN UNDERSTANDING OF THE FEDERAL AND STATE REGULATIONS FOR THE TREATMENT AND CARE OF THOSE SEEKING RECOVERY FROM SUBSTANCE ABUSE -- The student will be able to:

18.01 Describe the salient features of Federal laws governing the use of indexed substances.
18.02 Distinguish State Rules and Regulations governing both the illicit use of drugs and the scope and limits of treatment for those abusing such substances.
18.03 Apply correctly the appropriate Federal and/or State rule or regulation to case histories of treatment.

19.0 STUDENTS WILL DEMONSTRATE AN UNDERSTANDING OF THE ETHICAL REQUIREMENTS AND RESTRICTIONS IN TREATING INDIVIDUALS SEEKING RECOVERY FROM SUBSTANCE ABUSE -- The student will be able to:

19.01 Distinguish legal requirement from moral requirement.
19.02 Identify the categories of moral responsibility which arise out of legal requirements along with their specific sanctions.
19.03 Identify and evaluate conditions in which harm might be brought to a patient or client even when there are no legal sanctions restricting counselor/client (patient) relations.
19.04 Apply ethical reasoning to a broad range of case histories of specific counselor/client (patient) relations.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Massage

CODE NUMBER: Secondary ______ Postsecondary H120405

Florida CIP 0312.040500

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ______7-9 ______9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: MASSEUR @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as masseurs or masseuses (69999499), or to provide supplemental training for persons previously or currently employed in this occupation. The program must be approved by the Florida Board of Massage so that the graduates may take the state examination to practice as licensed masseuses.

The content includes, but is not limited to, the theory and practice of massage, theory and practice of hydrotherapy, theory and practice of heliotherapy, hygiene, practice demonstration, anatomy and physiology, legal aspects of massage practice, allied modalities, leadership and human relations skills, health and safety, CPR, and employability skills. Colonic irrigation is optional.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: The student will develop manipulative skills through instruction by demonstration. Student practices include massage techniques, and use of hydro- and heliotherapy equipment such as steam room, sauna, treatment tables, local and full immersion baths, whirlpool bath, cabinet baths, hot and cold packs, paraffin bath, and the use of infra red and ultraviolet lamps. Students may instruct others in the use of therapeutic exercise modalities.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

Colonic irrigation instruction is optional. When included, the students will be able to demonstrate knowledge of the theory of internal hydrotherapy and use the colonic machine in the administration of a colonic irrigation.

After completion of this program students are eligible to take the Florida Board of Massage licensure examination.

The cooperative method of instruction may be used for this program. When the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor andthe employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's

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career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 7.0, Language 10.0, and Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for an average student is 500 hours in accordance with Board approval.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Exhibit an understanding of the principles of the theory of massage and demonstrate the proper techniques of massage manipulations.
02. Exhibit an understanding of the principles of the theory of hydrotherapy and use hydrotherapy modalities.
03. Exhibit an understanding of the principles of heliotherapy and demonstrate the use of heliotherapy devices.
04. Demonstrate safety and health practices that are conducive to the hygiene of masseur and the patron.
05. Demonstrate knowledge of the statutes and rules of Florida Massage Practice Act.
06. Explain the use of allied modalities related to massage.
07. Demonstrate an understanding of anatomy and physiology as related to the practice of massage.
08. Explain leadership and human relation traits and ethical practices of massage.
09. Demonstrate employability skills.
10. Demonstrate an Understanding of Entrepreneurship.
11. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations — SECONDARY NUMBER: ______
PROGRAM TITLE: Massage — POSTSECONDARY NUMBER: H120405

01.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF THE THEORY OF MASSAGE AND DEMONSTRATE THE PROPER TECHNIQUES OF MASSAGE MANIPULATIONS

-- The student will be able to:

01.01 Discuss the history of massage and historical practitioners.
01.02 Explain the psysiological effects of massage.
01.03 Perform the various manipulations.
01.04 Discuss the effects of lubricants used in massage and apply lubricants.
01.05 Interview the patron to ascertain his/her indications and/or contraindications for therapy.
01.06 Operate massage equipment i.e., rollers, brushes, vibrators.

02.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF THE THEORY OF HYDROTHERAPY AND USE HYDROTHERAPY MODALITIES

-- The student will be able to:

02.01 Discuss the history of hydro-therapy and historical practitioners.
02.02 Interview the patrons to ascertain their indications and/or contraindications for therapy.
02.03 Perform hydro-therapy services such as hydro-kinetics, hydro-thermal and hydro-static.

03.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF HELIOTHERAPY AND DEMONSTRATE THE USE OF HELIOTHERAPY DEVICES

-- The student will be able to:

03.01 Explain the physiological effects of ultra violet and infra-red radiation.
03.02 Interview the patron to ascertain his/her indications and/or contraindications for therapy.
03.03 Operate ultra violet and infra red devices in the application of these treatments.

04.0 DEMONSTRATE SAFETY AND HEALTH PRACTICES THAT ARE CONDUCIVE TO THE HYGIENE OF MASSEUR AND THE PATRON

-- The student will be able to:

04.01 Explain the ways a facility should be planned and maintained to promote health and safety.
04.02 Report and/or correct any environmental hazard.
04.03 Practice good body mechanics.
04.04 Outline practices conducive to personal health, appearance and cleanliness.
04.05 Explain the principles and procedures of CPR.
04.06 Demonstrate a knowledge of infection control utilizing Center for Disease Control (CDC) guidelines.

05.0 DEMONSTRATE KNOWLEDGE OF THE STATUTES AND RULES OF FLORIDA MASSAGE PRACTICE ACT

-- The student will be able to:

05.01 State the purpose of the Massage Practice Act.
05.02 State the qualifications necessary for licensure and renewal of licence.
05.03 State the function of the Board of Massage and the Department of Professional Regulations.
05.04 State the conditions necessary for acceptance for examination by the Board.
05.05 State the requirements for massage establishments and their inspection.
05.06 State the fees required for testing, licensure and license

renewal.
05.07 State the disciplinary proceedings which correspond to misdemeanors under the law.
05.08 Define the terms: Board, Department, Massage, Masseur, Apprentice, Establishment, Licensure.

06.0 EXPLAIN THE USE OF ALLIED MODALITIES RELATED TO MASSAGE -- The student will be able to:

06.01 Identify the modalities.
06.02 Instruct patrons in the use of the allied modalities such as weights, trampolines, shoulder wheel, bicycles and rowing machines.

07.0 DEMONSTRATE AN UNDERSTANDING OF ANATOMY AND PHYSIOLOGY AS RELATED TO THE PRACTICE OF MASSAGE -- The student will be able to:

07.01 Explain the structure and function of all the body systems, organs, tissues and cells.
07.02 Explain the effects of massage, hydro-therapy, heliotherapy on the body.

08.0 EXPLAIN LEADERSHIP AND HUMAN RELATION TRAITS AND ETHICAL PRACTICES OF MASSAGE -- The student will be able to:

08.01 Identify the methods of communicating.
08.02 Explain behaviors which could alienate or develop rapport with others.
08.03 Explain behavior which develops leadership qualities.
08.04 Demonstrate ethical practices by behaviors such as punctuality, consideration of clients, confidentially, providing for the privacy and modesty of the patron and meeting the needs of the patron.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate acceptable employee health habits.

10.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP -- The student will be able to:

10.01 Define entrepreneurship.
10.02 Describe the importance of entrepreneurship to the American economy.
10.03 List the advantages and disadvantages of business ownership.
10.04 Identify the risks involved in ownership of a business.
10.05 Identify the necessary personal characteristics of a successful entrepreneur.
10.06 Identify the business skills needed to operate a small business efficiently and effectively.

11.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

11.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
11.02 Identify community resources and services available to the victims of immune-deficiency diseases.

11.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.

11.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

11.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Medical Assisting

CODE NUMBER: Secondary ______ Postsecondary H170503

Florida CIP 0317.050300

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____7-9 ____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: NURSING ED @ 5 MED ASST @ 7 G
PRAC NURSE @ 7 G TEC MED @ 7 G
LAB TECH @ 7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as medical assistants (66005437) or to provide supplemental training for persons previously or currently employed in this occupation. The program should meet the standards of the Essentials and Guidelines of an Accredited Educational Program for the Medical Assistant adopted by the American Association of Medical Assistants and the American Medical Association, 1984.

The content includes, but is not limited to, communication and interpersonal skills, legal and ethical responsibilities, health-illness concepts, administrative and clinical duties, emergency procedures including CPR and first aid, safety and security procedures, medical terminology, anatomy and physiology, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: The medical assistant laboratory should provide students practice in the following skills: telephone, receptionist duties, bookkeeping, processing insurance forms, filing, typing and transcribing, venipuncture, basic laboratory procedures, basic X-ray procedures, use of the microscope, EKG, and physical therapy treatment procedures.

Clinical learning experiences are a necessary part of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Program completers of an accredited program are eligible to take the American Association of Medical Assistants Certification Examination. If the program is not accredited, graduates are eligible to take the national examination after one year of employment.

The Medical Assistant graduate should be prepared to take the Basic X-Ray Machine Operator State exam. Contact Office of Radiation Control; DHRS; 1317 Winewood Boulevard; Tallahassee, Florida 32399; 904/487-3451.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, and Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 1300 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate the ability to communicate and use interpersonal skills effectively.
02. Demonstrate legal and ethical responsibilities.
03. Demonstrate an understanding of and apply health-illness concepts.
04. Perform administrative duties.
05. Demonstrate knowledge of pharmaceutical principles and administer medications.
06. Prepare patients for, assist with, and follow-up patients after examinations and treatment.
07. Demonstrate knowledge of immune-deficiency diseases, including AIDS.
08. Perform basic office diagnostic procedures.
09. Demonstrate knowledge of the fundamentals of microbial control and use aseptic techniques.
10. Recognize and respond to emergency situations.
11. Recognize and practice safety and security procedures.
12. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Medical Assisting POSTSECONDARY NUMBER: H170503

01.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

01.01 Identify listening and observation skills.
01.02 Respond to verbal and non-verbal cues.
01.03 Organize and express ideas in a concise, precise and logical manner.
01.04 Compose written communication using correct spelling, grammar and format.
01.05 Use medical terminology accurately.
01.06 Describe and demonstrate methods of displaying courtesy and tactfulness.
01.07 Adapt communication skills to varied levels of understanding and cultural orientation by using appropriate communicating techniques.
01.08 Inform patients of office policies.
01.09 Instruct patients regarding health care practices.

02.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

02.01 Provide health care within the legal framework of his/her job description.
02.02 Distinguish between the liability of the physicians and staff members.
02.03 Explain the principles for preventing medical liability.
02.04 Recognize and report symptoms of neglect and abuse.
02.05 Explain the patients "Bill of Rights".
02.06 List the principles the Codes of Ethics for Medical Assistants as stated by the American Association of Medical Assistants.
02.07 Maintain confidentiality of patient information.

03.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY HEALTH-ILLNESS CONCEPTS -- The student will be able to:

03.01 Identify the structure and functions of body systems.
03.02 Identify cause, effect and treatment of disease processes.
03.03 Use correct terminology related to basic body structure and function.
03.04 Describe personal health hygiene practices contributing to a state of wellness.
03.05 Describe appropriate life tasks as related to the developmental process from birth to death.

04.0 PERFORM ADMINISTRATIVE DUTIES -- The student will be able to:

04.01 Type and transcribe accurately.
04.02 Develop and maintain filing systems.
04.03 Operate and maintain office practices.
04.04 Apply computer concepts to office practices.
04.05 Prepare and maintain medical records.
04.06 Screen and process mail.
04.07 Schedule and monitor appointments.
04.08 Use procedural and diagnostic coding.
04.09 Process insurance data and claims.
04.10 Adhere to current government regulations.
04.11 Develop and maintain billing and collection system.
04.12 Maintain office inventory.
04.13 Arrange meetings and travel.
04.14 Perform general housekeeping duties.

04.15 Plan and organize daily office activities.

05.0 DEMONSTRATE KNOWLEDGE OF PHARMACEUTICAL PRINCIPLES AND ADMINISTER MEDICATIONS -- The student will be able to:

05.01 Identify commonly administered drugs, their uses and effects.
05.02 Use correct pharmaceutical abbreviations and terminology.
05.03 Identify various methods and routes of drug administration.
05.04 Calculate dosage and administer pharmaceuticals to correct anatomical sites, to correct patient, by correct route of administration, at the correct time and chart correctly.
05.05 Demonstrate knowledge of the legal and ethical standards related to the administration and the dispensing of drugs.

06.0 PREPARE PATIENTS FOR, ASSIST WITH, AND FOLLOW-UP PATIENTS AFTER EXAMINATIONS AND TREATMENTS -- The student will be able to:

06.01 Position and drape patients.
06.02 Measure and record vital signs.
06.03 Record patient data.
06.04 Assist the physician with examination, treatment, or minor surgery.
06.05 Organize examination and treatment areas before, during, and after patient care.
06.06 Perform minor treatments as directed by the physician including hot and cold therapy.

07.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

07.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
07.02 Identify community resources and services to the victim of immune-deficiency diseases.
07.03 Identify "at risk" behavior which promotes the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
07.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Center for Disease Control (CDC) guidelines.
07.05 Demonstrate knowledge of legal aspects of AIDS.

08.0 PERFORM BASIC OFFICE DIAGNOSTIC PROCEDURES -- The student will be able to:

08.01 Prepare patients for diagnostic procedures.
08.02 Collect blood specimens suitable for hematological, coagulation, and/or blood chemistry procedures by capillary puncture or veni puncture.
08.03 Demonstrate competence in the safe use and care of the clinical laboratory equipment.
08.04 Perform selected hematological, urinalysis and blood chemistry procedures.
08.05 Maintain a safe working environment in the clinical laboratory and radiological areas.
08.06 Perform and mount electrocardiographs.
08.07 Provide protection from radiation to patients and staff.
08.08 Position patients for x-rays.
08.09 Operate and maintain x-ray equipment/accessories.
08.10 Process x-ray film and maintain film files.
08.11 Evaluate x-ray film quality.
08.12 Perform visual and auditory screening.

09.0 DEMONSTRATE KNOWLEDGE OF THE FUNDAMENTALS OF MICROBIAL CONTROL AND USE ASEPTIC TECHNIQUES -- The student will be able to:

09.01 Demonstrate competence in sanitation, disinfection and

sterilization.
09.02 Practice infection control and contamination prevention.
09.03 Safely handle contaminated equipment and supplies.
09.04 Demonstrate competence in hand washing techniques.
09.05 Create and maintain sterile fields for dressings and minor surgery.
09.06 Correctly dispose of contaminated materials.

10.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

10.01 Describe legal parameters relating to administration of emergency care.
10.02 Maintain emergency equipment and supplies.
10.03 Operate emergency equipment.
10.04 Implement emergency procedures as indicated.
10.05 Perform cardiopulmonary resuscitation.

11.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

11.01 List the principles of safe practice in providing health care.
11.02 Report and/or correct safety hazards.
11.03 Demonstrate and practice correct body mechanics.
11.04 Identify and maintain office security policies/procedures.
11.05 Use precautions in the presence of ionizing radiation.

12.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

12.01 Conduct a job search.
12.02 Secure information about a job.
12.03 Identify documents that may be required when applying for a job.
12.04 Complete a job application correctly.
12.05 Demonstrate competence in job interview techniques.
12.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
12.07 Identify acceptable work habits.
12.08 Demonstrate knowledge of how to make job changes appropriately.
12.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Medical Clinical Dosimetry

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.020701

SECONDARY SCHOOL CREDITS _____	COLLEGE CREDITS x	POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

x Postsecondary Vocational Certification _____ Other __________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as dosimetrist, or provide supplemental training for persons previously or presently employed in this occupation.

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Therapist and/or Physicist, aids in the treatment of disease with ionizing radiation. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform clinical dosimetry procedures with skill and understand and practice the art of radiation therapy modality of treatment; to aid in development and implementation of a plan of treatment prescribed by the Radiation Therapist which will deliver treatments of the highest caliber, thereby providing the patient treatment planning of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient; to provide radiation protection to the patient, self and health care team; to provide a system of quality assurance for both equipment and treatment delivery; to design and fabricate specialized treatment aids necessary to offer state-of-the-art treatments; to assist the Physicist in the detection of erratic performance of equipment; to assist the Radiation Therapist in the preparation and administration of internal (brachytherapy) radiation therapy treatments; to work with the health care team to improve radiotherapeutic health care in the hospital and community; to manage personnel and the daily routine functions associated with a radiation therapy department; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

II. LABORATORY ACTIVITIES: Radiation therapy centers which provide clinical experiences for students to practice state-of-the-art radiation therapy technology. Students must be under the supervision of a qualified Radiation Therapist, Physicist or Dosimetrist.

Clinical education or internship has been established for students in this program. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical intern component of the program. After completion of the prerequisite practice of clinical internship in dosimetry procedures, students indicate to the faculty his/her readiness for evaluation of competence in a specific competency category/procedure.

Multiple affiliates are utilized for the clinical internship activities which provide equitable opportunities for the student to achieve the program clinical objectives. The resulting clinical internship rotations provide students with the techniques of dosimetry for the delivery of treatments utilizing a variety of megavoltage equipment, simulation and localization, machine calibration, quality assurance, radiation protection, preparation and handling of brachytherapy sources and systems of documentation and verification.

III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization. Student membership in the professional organization, American Association of Medical Dosimetrists, is encouraged. In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 750 hours with a college credit certificate.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Discuss the patient's diagnosis with the Radiation Therapist and what he/she wishes to achieve by irradiation.
02. Supervise or accomplish simulation and localization of the treatment volume by topographical landmarks and verification (portal) filming and prepare the contour or contours for the patient.
03. Prepare daily set-up sheets detailing information relating to dose, daily dose per field, field weighting, wedges, shielding, etc. and to prepare final chart check and dosage summary after completion of therapy for presentation to the Radiation Therapist.
04. Apply isodose charts or computer to the treatment problem to produce a treatment plan or plans for presentation to the Radiation Therapist.
05. Calculate, using hand or computer, the setting necessary to accomplish the treatment plan as approved by the Radiation Therapist.
06. Supervise or accomplish planning for special procedures; skin compensatory filters; field separation; cutting custom designed blocks; construction of wedge filters; construction of other shielding devices.
07. Supervise mould room techniques including immobilization casts.
08. Responsible for quality control and accurate beam alignment in all patient set-ups.
09. Function as an assistant Radiation Therapist and Physicist in intracavitary/interstitial implant procedures and prepare the dose calculation for these.
10. Assist the Radiation Therapy Physicist in calibration procedures, detection of erratic performance of equipment, and in the organization and maintenance of the radiation protection program.
11. Be responsible for "in vivo" dosimetry.
12. Work with the Radiation Therapist and Physicist with the implementation of new techniques of radiation therapy.
13. Instruct other personnel in departmental procedures.
14. Participate in practical and research problems involving dosimetry.
15. Demonstrate proficiency in employability skills.
16. Demonstrate knowledge of sexually transmitted diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Medical Clinical Dosimetry POSTSECONDARY NUMBER: ______

01.0 DISCUSS THE PATIENT'S DIAGNOSIS WITH THE RADIATION THERAPIST AND WHAT HE/SHE WISHES TO ACHIEVE BY IRRADIATION -- The student will be able to:

01.01 Identify the anatomical location of the treatment volume and the surrounding normal structures.
01.02 Verify the treatment modality and unit, field size, blocking, dosage of critical organs and the treatment volume and any other specialized treatment aids.

02.0 SUPERVISE OR ACCOMPLISH SIMULATION AND LOCALIZATION OF THE TREATMENT VOLUME BY TOPOGRAPHICAL LANDMARKS AND VERIFICATION (PORTAL) FILMING AND PREPARE THE CONTOUR OR CONTOURS FOR THE PATIENT -- The student will be able to:

02.01 Outline the plan of treatment to the Radiation Therapy Technologist.
02.02 Identify the patient and orient the patient as to the intent of the procedure.
02.03 Position the patient in the optimum position for accomplishment of the planned method of treatment.
02.04 Ensure placement of any treatment accessories and documentation of their use in the set-up sheet.
02.05 Position equipment to localize and delineate the desired treatment volume with necessary markers.
02.06 Perform localization procedures as required.
02.07 Obtain the Radiation Therapist approval for the optimum treatment plan as outlined on the simulation film.

03.0 PREPARE DAILY SET-UP SHEETS DETAILING INFORMATION RELATING TO DOSE, DAILY DOSE PER FIELD, FIELD WEIGHTING, WEDGES, SHIELDING, ETC. AND TO PREPARE FINAL CHART CHECK AND DOSAGE SUMMARY AFTER COMPLETION OF THERAPY FOR PRESENTATION TO THE RADIATION THERAPIST -- The student will be able to:

03.01 Record the approved treatment information, such as the anatomical description, equipment and modality, SSD/SAD, field size, type of blocking, treatment depth, daily fraction, gantry angle, and special instructions and film.

04.0 APPLY ISODOSE CHARTS OR COMPUTER TO THE TREATMENT PROBLEM TO PRODUCE A TREATMENT PLAN OR PLANS FOR PRESENTATION TO THE RADIATION THERAPIST -- The student will be able to:

04.01 Select the appropriate beam information according to the equipment and modality, SSD/SAD field size, gantry angle, blocking, technique and any other special treatment aids.
04.02 Perform isodose distribution for the treatment plans or plans.
04.03 Obtain approval from the Radiation Therapist.
04.04 Document the approved treatment plan.

05.0 CALCULATE, USING HAND OR COMPUTER, THE SETTING NECESSARY TO ACCOMPLISH THE TREATMENT PLAN AS APPROVED BY THE RADIATION THERAPIST -- The student will be able to:

05.01 Select the appropriate beam information according to equipment and modality, SSD/SAD field size, gantry angle, blocking, technique and any other special treatment aids.
05.02 Generate the appropriate factors to perform the calculation, ie: Output Factor, TMR, %depth dose, TAR, SAR, wedge factor, etc.
05.03 Obtain the final setting to be used in treatment delivery.

05.04 Obtain a verification of the calculation by the Physicist.
05.05 Document the calculation.

06.0 SUPERVISE OR ACCOMPLISH PLANNING FOR SPECIAL PROCEDURES; SKIN COMPENSATORY FILTERS, FIELD SEPARATION, CUTTING CUSTOM DESIGNED BLOCKS; CONSTRUCTION OF WEDGE FILTERS; CONSTRUCTION OF OTHER SHIELDING DEVICES -- The student will be able to:

06.01 Perform irregular field calculations for blocked fields.
06.02 Perform field separation or gap calculation for adjacent fields.
06.03 Fabricate lead equivalent shielding blocks as prescribed by the Radiation Therapist.
06.04 Fabricate compensating filters and required.
06.05 Fabricate skin compensating materials (bolus).
06.06 Fabricate other shielding devices such as lead shielding cut outs.
06.07 Document the use of the treatment aid.

07.0 SUPERVISE MOULD ROOM TECHNIQUES INCLUDING IMMOBILIZATION CASTS -- The student will be able to:

07.01 Fabricate immobilization devices which may be made of plaster casting material, fiberglass material or perspex.
07.02 Document the use of the immobilization device.

08.0 RESPONSIBLE FOR QUALITY CONTROL AND ACCURATE BEAM ALIGNMENT IN ALL PATIENT SET-UPS -- The student will be able to:

08.01 Develop and maintain a system of quality assurance checks each morning on all treatment units.
08.02 Perform QA checks and document the results.
08.03 Inform the Physicist of any equipment inconsistency from the specified values.
08.04 Inform the Radiation Therapist of any dosage errors.

09.0 FUNCTION AS AN ASSISTANT RADIATION THERAPIST AND PHYSICIST IN INTRACAVITARY/INTERSTITIAL IMPLANT PROCEDURES AND PREPARE THE DOSE CALCULATION FOR THESE -- The student will be able to:

09.01 Prepare the applicator for sterilization and delivery to the implant location.
09.02 Monitor any implants necessary, ie. iodine 125.
09.03 Assist the Radiation Therapist in the placement of the applicator.
09.04 Perform or supervise the localization films after placement of the applicator.
09.05 Prepare the radioactive sources for insertion into the applicator.
09.06 Document removal of the sources.
09.07 Transport the radioactive sources to the patients location.
09.08 Assist the Radiation Therapist in placement of the radioactive sources.
09.09 Take and record appropriate radiation levels in accordance with the recommendations of the NRC.
09.10 Assist in the removal of the radioactive sources.
09.11 Perform dosage calculations utilizing the radiographs done for the applicator localization.
09.12 Transport, return and document the replacement of the radioactive sources as indicated by the dosage calculation.

10.0 ASSIST THE RADIATION THERAPY PHYSICIST IN CALIBRATION PROCEDURES, DETECTION OF ERRATIC PERFORMANCE OF EQUIPMENT, AND IN THE ORGANIZATION AND MAINTENANCE OF THE RADIATION PROTECTION PROGRAM -- The student will be able to:

10.01 Wear appropriate monitoring device while on duty to obtain a record of radiation exposure over a period of time.

10.02 Protect workers and others in the area from radiation exposure.
10.03 Perform radiation surveys as directed by the Physicist.

11.0 BE RESPONSIBLE FOR "IN VIVO" DOSIMETRY -- The student will be able to:

11.01 Place TLD crystals as directed in the treatment field in order to verify dosage.
11.02 Read and record dose verified.
11.03 Perform other in vivo dosimetry as directed.

12.0 WORK WITH THE RADIATION THERAPIST AND PHYSICIST WITH THE IMPLEMENTATION OF NEW TECHNIQUES OF RADIATION THERAPY -- The student will be able to:

12.01 Maintain abreast of current publications regarding new treatment techniques.
12.02 Strive to isolate new topics for publications.

13.0 INSTRUCT OTHER PERSONNEL IN DEPARTMENTAL PROCEDURES -- The student will be able to:

13.01 Participate in continuing education activities for personnel in radiation therapy.
13.02 Participate in educational conferences in radiation therapy.

14.0 PARTICIPATE IN PRACTICAL AND RESEARCH PROBLEMS INVOLVING DOSIMETRY -- The student will be able to:

14.01 Participate in research problems with the Radiation Therapist and Physicist.

15.0 DEMONSTRATE PROFICIENCY IN EMPLOYABILITY SKILLS -- The student will be able to:

15.01 Conduct a job search.
15.02 Secure information about a job.
15.03 Identify documents which may be required when applying for a job interview.
15.04 Complete a job application form correctly.
15.05 Demonstrate competence in a job interview technique.
15.06 Identify or demonstrate appropriate responses to criticism for employer, supervisor, or other employees.
15.07 Identify and adopt acceptable work habits.
15.08 Demonstrate knowledge of how to make job changes appropriately.
15.09 Demonstrate acceptable employee health habits.

16.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS -- The student will be able to:

16.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
16.02 Identify community resources and services available to the victims of sexually transmitted diseases.
16.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
16.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Medical Clinical Dosimetry Management

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.020700

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____Postsecondary Adult Vocational

x Postsecondary Vocational ____Other ________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as dosimetrist managers, or provide supplemental training for persons previously or presently employed in this occupation.

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Therapist and/or Physicist, aids in the treatment of disease with ionizing radiation. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform clinical dosimetry procedures with skill and understanding to practice the art of radiation therapy as a modality of treatment; to aid in development and implementation of a plan of treatment prescribed by the Radiation Therapist which will deliver treatments of the highest caliber, thereby providing the patient treatment planning of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient; to provide radiation protection to the patient, self and health care team; to provide a system of quality assurance for both equipment and treatment delivery; to design and fabricate specialized treatment aids necessary to offer state-of-the-art treatments; to assist the Physicist in the detection of erratic performance of equipment; to assist the Radiation Therapist in the preparation and administration of internal (brachytherapy) radiation therapy treatments, to work with the health care team to improve radiotherapeutic health care in the hospital and community; to manage personnel and the daily routine functions associated with a radiation therapy department; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

II. LABORATORY/INTERN ACTIVITIES: Radiation therapy centers which provide clinical internship experiences for students to practice state-of-the-art radiation therapy technology. Students must be under the supervision of a qualified Radiation Therapist Physicist or Dosimetrist.

Clinical education or internship has been established for students in this program. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical intern component of the program. After completion of the prerequisite practice of clinical internship in dosimetry procedures, students indicate to the faculty his/her readiness for evaluation of competence in a specific competency category/procedure.

Multiple affiliates are utilized for the clinical internship activities which provide equitable opportunities for the student to achieve the program clinical objectives. The resulting clinical internship rotations provide students with the techniques of dosimetry for the delivery of treatments utilizing a variety of megavoltage equipment, simulation and localization, machine calibration, quality assurance, radiation protection, preparation and handling of brachytherapy sources and systems of documentation and verification.

III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization. Student membership in the professional organization, American Association of Medical Dosimetrists, is encouraged. In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Discuss the patient's diagnosis with the Radiation Therapist and what he/she wishes to achieve by irradiation.
02. Supervise or accomplish simulation and localization of the treatment volume by topographical landmarks and verification (portal) filming and prepare the contour or contours for the patient.
03. Prepare daily set-up sheets detailing information relating to dose, daily dose per field, field weighting, wedges, shielding, etc. and to prepare final chart check and dosage summary after completion of therapy for presentation to the Radiation Therapist.
04. Apply isodose charts or computer to the treatment problem to produce a treatment plan or plans for presentation to the Radiation Therapist.
05. Calculate, using hand or computer, the setting necessary to accomplish the treatment plan as approved by the Radiation Therapist.
06. Supervise or accomplish planning for special procedures; skin compensatory filters; field separation; cutting custom designed blocks; construction of wedge filters; construction of other shielding devices.
07. Supervise mould room techniques including immobilization casts.
08. Responsible for quality control and accurate beam alignment in all patient set-ups.
09. Function as an assistant Radiation Therapist and Physicist in intracavitary/interstitial implant procedures and prepare the dose calculation for these.
10. Assist the Radiation Therapy Physicist in calibration procedures, detection of erratic performance of equipment, and in the organization and maintenance of the radiation protection program.
11. Be responsible for "in vivo" dosimetry.
12. Work with the Radiation Therapist and Physicist with the implementation of new techniques of radiation therapy.
13. Instruct other personnel.
14. Participate in practical research problems involving dosimetry.
15. Act as an office manager or departmental manager.
16. Demonstrate proficiency in employability skills.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1994

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Medical Clinical Dosimetry Management POSTSECONDARY NUMBER: 0317.020700

01.0 DISCUSS THE PATIENT'S DIAGNOSIS WITH THE RADIATION THERAPIST AND WHAT HE/SHE WISHES TO ACHIEVE BY IRRADIATION
-- The student will be able to:

01.01 Identify the anatomical location of the treatment volume and the surrounding normal structures.
01.02 Verify the treatment modality and unit, field size, blocking, dosage of critical organs and the treatment volume and any other specialized treatment aids.

02.0 SUPERVISE OR ACCOMPLISH SIMULATION AND LOCALIZATION OF THE TREATMENT VOLUME BY TOPOGRAPHICAL LANDMARKS AND VERIFICATION (PORTAL) FILMING AND PREPARE THE CONTOUR OR CONTOURS FOR THE PATIENT
-- The student will be able to:

02.01 Outline the plan of treatment to the Radiation Therapy Technologist.
02.02 Identify the patient and orient the patient as to the intent of the procedure.
02.03 Position the patient in the optimum position for accomplishment of the planned method of treatment.
02.04 Ensure placement of any treatment accessories and documentation of their use in the set-up sheet.
02.05 Position equipment to localize and delineate the desired treatment volume with necessary markers.
02.06 Perform localization procedures as required.
02.07 Obtain the Radiation Therapist approval for the optimum treatment plan as outlined on the simulation film.
02.08 Obtain a radiograph of the treatment volume as approved by the Radiation Therapist.

03.0 PREPARE DAILY SET-UP SHEETS DETAILING INFORMATION RELATING TO DOSE, DAILY DOSE PER FIELD, FIELD WEIGHTING, WEDGES, SHIELDING, ETC. AND TO PREPARE FINAL CHART CHECK AND DOSAGE SUMMARY AFTER COMPLETION OF THERAPY FOR PRESENTATION TO THE RADIATION THERAPIST
-- The student will be able to:

03.01 Record the approved treatment information, such as the anatomical description, equipment and modality, SSD/SAD, field size, type of blocking, treatment depth, daily fraction, gantry angle, any special instructions and film.

04.0 APPLY ISODOSE CHARTS OR COMPUTER TO THE TREATMENT PROBLEM TO PRODUCE A TREATMENT PLAN OR PLANS FOR PRESENTATION TO THE RADIATION THERAPIST
-- The student will be able to:

04.01 Select the appropriate beam information according to the equipment and modality, SSD/SAD, field size, gantry angle, blocking, technique and any other special treatment aids.
04.02 Perform isodose distribution for the treatment plan or plans.
04.03 Obtain approval from the Radiation Therapist.
04.04 Document the approved treatment plan.

05.0 CALCULATE, USING HAND OR COMPUTER, THE SETTING NECESSARY TO ACCOMPLISH THE TREATMENT PLAN AS APPROVED BY THE RADIATION THERAPIST
-- The student will be able to:

05.01 Select the appropriate beam information according to equipment and modality, SSD/SAD, field size, gantry angle, blocking, technique and any other special treatment aids.

05.02 Generate the appropriate factors to perform the calculation, i.e., Output Factor, TMR, % depth dose, TAR, SAR, wedge factor, etc..

05.03 Obtain the final setting to be used in treatment delivery.

05.04 Obtain a verification of the calculation by the Physicist.

05.05 Document the calculation.

06.0 SUPERVISE OR ACCOMPLISH PLANNING FOR SPECIAL PROCEDURES; SKIN COMPENSATORY FILTERS; FIELD SEPARATION; CUTTING CUSTOM DESIGNED BLOCKS; CONSTRUCTION OF WEDGE FILTERS; CONSTRUCTION OF OTHER SHIELDING DEVICES -- The student will be able to:

06.01 Perform irregular field calculations for blocked fields.

06.02 Perform field separation or gap calculation for adjacent fields.

06.03 Fabricate lead equivalent shielding blocks as prescribed by the Radiation Therapist.

06.04 Fabricate compensating filters as required.

06.05 Fabricate skin compensating materials (bolus).

06.06 Fabricate other shielding devices such as lead shielding cut outs.

06.07 Document the use of the treatment aid.

07.0 SUPERVISE, MOULD ROOM TECHNIQUES INCLUDING IMMOBILIZATION CASTS -- The student will be able to:

07.01 Fabricate immobilization devices which may be made of plaster casting material, fiberglass material or perspex.

07.02 Document the use of the immobilization device.

08.0 RESPONSIBLE FOR QUALITY CONTROL AND ACCURATE BEAM ALIGNMENT IN ALL PATIENT SET-UPS -- The student will be able to:

08.01 Develop and maintain a system of quality assurance checks each morning on all treatment units.

08.02 Perform QA checks and document the results.

08.03 Inform the Physicist of any equipment inconsistency from the specified values.

08.04 Inform the Radiation Therapist of any dosage errors.

09.0 FUNCTION AS AN ASSISTANT RADIATION THERAPIST AND PHYSICIST IN INTRACAVITARY/INTERSTITIAL IMPLANT PROCEDURES AND PREPARE THE DOSE CALCULATION FOR THESE -- The student will be able to:

09.01 Prepare the applicator for sterilization and delivery to the implant location.

09.02 Monitor any implants necessary, i.e., iodine 125.

09.03 Assist the Radiation Therapist in the placement of the applicator.

09.04 Perform or supervise the localization films after placement of the applicator.

09.05 Prepare the radioactive sources for insertion into the applicator.

09.06 Document removal of the sources.

09.07 Transport the radioactive sources to the patients location.

09.08 Assist the Radiation Therapist in placement of the radioactive sources.

09.09 Take and record appropriate radiation levels in accordance with the recommendations of the NRC.

09.10 Assist in the removal of the radioactive sources.

09.11 Perform dosage calculations utilizing the radiographs done for the applicator localization.

09.12 Transport, return and document the replacement of the radioactive sources as indicated by the dosage calculation.

10.0 ASSIST THE RADIATION THERAPY PHYSICIST IN CALIBRATION PROCEDURES, DETECTION OF ERRATIC PERFORMANCE OF EQUIPMENT, AND IN THE ORGANIZATION AND MAINTENANCE OF THE RADIATION PROTECTION PROGRAM

-- The student will be able to:

10.01 Wear appropriate monitoring device while on duty to obtain a record of radiation exposure over a period of time.
10.02 Protect workers and others in the area from radiation exposure.
10.03 Perform radiation surveys as directed by the Physicist.

11.0 BE RESPONSIBLE FOR "IN VIVO" DOSIMETRY

-- The student will be able to:

11.01 Place TLD crystals as directed in the treatment field in order to verify dosage.
11.02 Read and record dose verified.
11.03 Perform other "in vivo" dosimetry as directed.

12.0 WORK WITH THE RADIATION THERAPIST AND PHYSICIST WITH THE IMPLEMENTATION OF NEW TECHNIQUES OF RADIATION THERAPY

-- The student will be able to:

12.01 Maintain abreast of current publications regarding new treatment techniques.
12.02 Strive to isolate new topics for publication.

13.0 INSTRUCT OTHER PERSONNEL IN DEPARTMENTAL PROCEDURES

-- The student will be able to:

13.01 Participate in continuing education activities for personnel in radiation therapy.
13.02 Participate in educational conferences in radiation therapy.

14.0 PARTICIPATE IN PRACTICAL RESEARCH PROBLEMS INVOLVING DOSIMETRY

-- The student will be able to:

14.01 Participate in research problems with the Radiation Therapist and Physicist.

15.0 PERFORM THE DUTIES AS AN OFFICE OR DEPARTMENTAL MANAGER

-- The student will be able to:

15.01 Assist the preparation of the operating budget.
15.02 Assist in the hiring and supervision of personnel.
15.03 Develop and maintain office or departmental policies and procedures.

16.0 DEMONSTRATE PROFICIENCY IN EMPLOYABILITY SKILLS

-- The student will be able to:

16.01 Conduct a job search.
16.02 Secure information about a job.
16.03 Identify documents which may be required when applying for a job interview.
16.04 Complete a job application form correctly.
16.05 Demonstrate competence in job interview technique.
16.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other employees.
16.07 Identify and adopt acceptable work habits.
16.08 Demonstrate knowledge of how to make job changes appropriately.
16.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Medical Laboratory Assisting

CODE NUMBER: Secondary 8409000 Postsecondary: H170304

Florida CIP 0317.030400

SECONDARY
SCHOOL CREDITS 3 COLLEGE CREDITS ______ POSTSECONDARY ADULT
VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____7-9 _____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 10-12, 30, 31

CERTIFICATION COVERAGE: LAB TECH @ 7 G LAB ASST @ 7 G TEC MED @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as medical/clinical lab technicians (32905210), or medical laboratory aides or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, communication, interpersonal and professional skills, appropriate scientific principles of microbiology, chemistry, physics, anatomy and physiology integrated into skill development and clinical learning.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8409010	Medical Laboratory Assisting 1
8409020	Medical Laboratory Assisting 2
8409030	Medical Laboratory Assisting 3

II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program. Clinical experience is defined as laboratory activities performed in the clinical setting under the supervision of a medical laboratory technician or technologist.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0, and Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee.

This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 450 clock hours.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Apply basic science skills
02. Apply basic math skills.
03. Demonstrate skills of communication, ethical behavior and safety in the clinical setting.
04. Demonstrate employability skills.
05. Based on knowledge of microbiology, urinalysis, clinical chemistry, and hematology, perform clinical laboratory skills.
06. Based on knowledge of the heart and circulatory system, perform CPR and electrocardiograph techniques.
07. Based on knowledge of anatomy and physiology, perform venipunctures and skin punctures, prepare blood smears, label and process specimens.
08. Successfully complete learning experiences in the clinical setting.
09. Identify a health career and an aide level job which meets personal goals.
10. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS   EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations   SECONDARY NUMBER: 8409000

PROGRAM TITLE: Medical Laboratory Assisting   POSTSECONDARY NUMBER: H170304

01.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

01.01 Demonstrate ability to evaluate and draw conclusions.
01.02 Apply infection control techniques following center for Disease Control (CDC) guidelines.
01.03 Apply the principles of medical/surgical asepsis.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, and analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity, and mass/weight.
02.03 Make estimates and approximations and judge the reasonableness of the result.
02.04 Convert from regular to 24 hour clock time.

03.0 DEMONSTRATE SKILLS OF COMMUNICATION, ETHICAL BEHAVIOR AND SAFETY IN THE CLINICAL SETTING -- The student will be able to:

03.01 Recognize techniques to overcome barriers to verbal and written communication.
03.02 Use appropriate medical terminology and abbreviations.
03.03 Demonstrate safe use of equipment and materials.
03.04 Properly identify patients.
03.05 Follow approved procedures for labeling.
03.06 Identify patient's and health workers' rights and responsibilities.
03.07 Behave ethically in the classroom and clinical settings.
03.08 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
03.09 Distinguish factual reports and personal opinion.
03.10 Demonstrate ability to report observations in written or oral form.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application correctly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 BASED ON KNOWLEDGE OF MICROBIOLOGY, URINALYSIS, CLINICAL CHEMISTRY, AND HEMATOLOGY, PERFORM CLINICAL LABORATORY SKILLS -- The student will be able to:

05.01 Perform techniques of microbiology related to disinfection techniques.
05.02 Perform techniques of microbiology related to isolation techniques.
05.03 Perform techniques of microbiology related to sterilization techniques.
05.04 Perform techniques of microbiology related to preparation,

staining and microscopic examination of gram stains.
05.05 Perform techniques of microbiology related to inoculation and transfer of cultures.
05.06 Perform basic techniques of microbiology
05.07 Perform techniques of microbiology related to preparation of artificial culture media.
05.08 Perform techniques of microbiology related to principles and use of the microscope.
05.09 Perform urinalysis techniques related to normal and abnormal components of the urine.
05.10 Perform urinalysis techniques related to collection and preservation of specimens.
05.11 Perform urinalysis techniques related to physical properties of urine and related odors, color.
05.12 Perform urinalysis techniques related to urine pH and describe clinical significance.
05.13 Perform urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometers and refractometers.
05.14 Perform urinalysis techniques related to performance of chemical tests.
05.15 Perform urinalysis techniques related to microscopic identification of significant elements.
05.16 Perform urinalysis techniques related to principles and use of centrifuge.
05.17 Perform techniques of clinical chemistry related to metric measurement.
05.18 Perform techniques of clinical chemistry related to laboratory glassware and equipment.
05.19 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.
05.20 Perform techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.
05.21 Perform techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.
05.22 Perform techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.
05.23 Perform basic techniques of clinical chemistry related to normal and abnormal physiology.
05.24 Perform techniques of hematology related to counting formed elements of blood.
05.25 Perform techniques of hematology related to preparation, staining and cell differential microscopic examination of blood films.
05.26 Perform techniques of hematology related to hematocrit tests.
05.27 Perform techniques of hematology related to bleeding and clotting times.
05.28 Perform techniques of hematology related to hemoglobin tests.
05.29 Perform techniques of hematology related to calculation of red blood cell indices.
05.30 Perform basic techniques of hematology related to normal and abnormal physiology.

06.0 BASED ON KNOWLEDGE OF THE HEART AND CIRCULATORY SYSTEM, PERFORM CPR AND ELECTROCARDIOGRAPH TECHNIQUES -- The student will be able to:

06.01 Demonstrate knowledge of anatomy and physiology of the heart.
06.02 Perform the electrocardiogram test.
06.03 Perform CPR and first aid.

07.0 BASED ON KNOWLEDGE OF ANATOMY AND PHYSIOLOGY, PERFORM VENIPUNCTURES AND SKIN PUNCTURES, PREPARE BLOOD SMEARS, LABEL AND PROCESS SPECIMENS -- The student will be able to:

07.01 Demonstrate knowledge of established protocol for patient and specimen identification.
07.02 Perform appropriate methods for decontaminating site for skin or

venipuncture.
07.03 Perform venipunctures by evacuated tube and syringe systems.
07.04 Perform skin punctures.
07.05 Prepare blood smears.
07.06 Label and process specimens.

08.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING -- The student will be able to:

08.01 Observe skills outlined in outcomes 1, 2, 3 and 4.
08.02 Complete clinical rotations.

09.0 IDENTIFY A HEALTH CAREER AND AN AIDE LEVEL JOB WHICH MEETS PERSONAL GOALS -- The student will be able to:

09.01 Examine the requirements of worker in the major health career clusters.
09.02 Compare personal qualities and aptitudes with requirements of selected careers.
09.03 Decide which health career, if any, meets his/her personal career goals.
09.04 Decide which entry level health job meets his/her personal needs.

10.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
10.02 Identify community resources and services available to the victim of immune-deficiency diseases.
10.03 Identify "at risk" behavior which promotes the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
10.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Center for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health COURSE CREDIT: 1
PROGRAM TITLE: Medical Laboratory Assisting PROGRAM NUMBER: 8409000
COURSE TITLE: Medical Laboratory Assisting 1 COURSE NUMBER: 8409010

COURSE DESCRIPTION: This course prepares students with communication, career development, safety, legal and ethical skills relevant to medical laboratory assisting. The content includes but is not limited to anatomy and physiology, general physics and chemistry.

01.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

01.01 Demonstrate ability to evaluate and draw conclusions.
01.02 Apply infection control techniques following center for Disease Control (CDC) guidelines.
01.03 Apply the principles of medical/surgical asepsis.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, and analyze, and report on graphs. charts. and tables.
02.02 Measure time, temperature, distrance, capacity, and mass/weight.
02.03 Make estimates and approximations and judge the reasonableness of the result.
02.04 Convert from regular to 24 hour clock time.

03.0 DEMONSTRATE SKILLS OF COMMUNICATION, ETHICAL BEHAVIOR AND SAFETY IN THE CLINICAL SETTING -- The student will be able to:

03.01 Recognize techniques to overcome barriers to verbal and written communication.
03.02 Use appropriate medical terminology and abbreviations.
03.03 Demonstrate safe use of equipment and materials.
03.04 Properly identify patients.
03.05 Follow approved procedures for labeling.
03.06 Identify patient's and health workers' rights and responsibilities.
03.07 Behave ethically in the classroom and clinical settings.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application correctly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

09.0 IDENTIFY A HEALTH CAREER AND AN AIDE LEVEL JOB WHICH MEETS PERSONAL GOALS -- The student will be able to:

09.01 Examine the requirements of worker in the major health career clusters.
09.02 Compare personal qualities and aptitudes with requirements of selected careers.
09.03 Decide which health career, if any, meets his/her personal career goals.
09.04 Decide which entry level health job meets his/her personal needs.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health COURSE CREDIT: 1

PROGRAM TITLE: Medical Laboratory Assisting PROGRAM NUMBER: 8409000

COURSE TITLE: Medical Laboratory Assisting 2 COURSE NUMBER: 8409020

COURSE DESCRIPTION: This course prepares students with basic knowledge of microbiology, urinalysis, clinical chemistry and hematology. Basic laboratory skills are practiced in the classroom. Pathological conditions of illness due to diet and lifestyle are studied. Use and care of expensive laboratory equipment are stressed.

05.0 BASED ON KNOWLEDGE OF MICROBIOLOGY, URINALYSIS, CLINICAL CHEMISTRY, AND HEMATOLOGY, PERFORM CLINICAL LABORATORY SKILLS -- The student will be able to:

05.01 Perform techniques of microbiology related to disinfection techniques.
05.02 Perform techniques of microbiology related to isolation techniques.
05.03 Perform techniques of microbiology related to sterilization techniques.
05.04 Perform techniques of microbiology related to preparation, staining and microscopic examination of gram stains.
05.05 Perform techniques of microbiology related to inoculation and transfer of cultures.
05.06 Perform techniques of microbiology related to identification of colonial characteristics of selected microorganisms.
05.07 Perform techniques of microbiology related to preparation of artificial culture media.
05.08 Perform techniques of microbiology related to principles and use of the microscope.
05.09 Perform urinalysis techniques related to normal and abnormal components of the urine.
05.10 Perform urinalysis techniques related to collection and preservation of specimens.
05.11 Perform urinalysis techniques related to physical properties of urine and related odors, color.
05.12 Perform urinalysis techniques related to urine ph and describe clinical significance.
05.13 Perform urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometers and refractometers.
05.14 Perform urinalysis techniques related to performance of chemical tests.
05.15 Perform urinalysis techniques related to microscopic identification of significant elements.
05.16 Perform urinalysis techniques related to principles and use of centrifuge.
05.17 Perform techniques of clinical chemistry related to metric measurement.
05.18 Perform techniques of clinical chemistry related to laboratory glassware and equipment.
05.19 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.
05.20 Perform techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.
05.21 Perform techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.
05.22 Perform techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.
05.23 Perform techniques of clinical chemistry related to normal

abnormal physiology.

05.24 Perform techniques of hematology related to counting formed elements of blood.

05.25 Perform techniques of hematology related to preparation, staining and cell differential microscopic examination of blood films.

05.26 Perform techniques of hematology related to hematocrit tests.

05.27 Perform techniques of hematology related to bleeding and clotting times.

05.28 Perform techniques of hematology related to hemoglobin tests.

05.29 Perform techniques of hematology related to calculation of red blood cell indices.

05.30 Perform techniques of hematology related to normal and abnormal physiology.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health COURSE CREDIT: 1

PROGRAM TITLE: Medical Laboratory Assisting PROGRAM NUMBER: 8409000

COURSE TITLE: Medical Laboratory Assisting 3 COURSE NUMBER: 8409030

COURSE DESCRIPTION: This course prepares students to perform CPR, EKG, and blood sample collection. These will be performed in a clinical setting. Written contractual agreements must be prepared for each clinical setting. The instructor must be physically present in the hospital laboratory setting. Students will be employable at the aide level for hospital bleeding teams or EKG Departments.

06.0 BASED ON KNOWLEDGE OF THE HEART AND CIRCULATORY SYSTEM, PERFORM CPR AND ELECTROCARDIOGRAPH TECHNIQUES -- The student will be able to:

06.01 Demonstrate knowledge of anatomy and physiology of the heart.
06.02 Perform the electrocardiogram test.
06.03 Perform CPR and first aid.

07.0 BASED ON KNOWLEDGE OF ANATOMY AND PHYSIOLOGY, PERFORM VENIPUNCTURES AND SKIN PUNCTURES, PREPARE BLOOD SMEARS, LABEL AND PROCESS SPECIMENS -- The student will be able to:

07.01 Demonstrate knowledge of established protocol for patient and specimen identification.
07.02 Perform appropriate methods for decontaminating site for skin or venipuncture.
07.03 Perform venipunctures by evacuated tube and syringe systems.
07.04 Perform skin punctures.
07.05 Prepare blood smears.
07.06 Label and process specimens.

08.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING -- The student will be able to:

08.01 Demonstrate mastery of skills outlined in outcomes 1, 2, 3 and 4.
08.02 Complete clinical rotations.

10.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
10.02 Identify community resources and services available to the victim of immune-deficiency diseases.
10.03 Identify "at risk" behavior which promotes the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
10.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Center for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Medical Laboratory Technology (Associate Degree)

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.030900

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 ____Postsecondary Adult Vocational

x Postsecondary Vocational ______ Other ____________________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as medical/clinical laboratory technologist (32902211), or medical laboratory technologists (associate degree) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to specific techniques and instruments, identification of factors directly affecting procedures and results, confirmation of results and monitoring quality control programs within pre-determined parameters, and correction of errors using pre-set standards. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

III. SPECIAL NOTE: Duly chartered medical laboratory professional society student organizations and/or Health Occupations Students of America, Inc., are the appropriate organizations for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The graduate should be prepared to take the appropriate licensing examination to practice in Florida and an appropriate national certifying examination.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is an associate degree.

IV. DEFINITIONS Define: To describe the basic qualities and principles.
Demonstrate: To show by performance, simulation, explanation or illustration.

Identify: To physically select, indicate, or explain verbally/or in writing, using standard terms recognized in the clinical laboratory.

V. INTENDED OUTCOMES: After successfully completing this program, the student will be able to perform all intended outcomes listed in the Medical Laboratory Technology (Certificate) and the Phlebotomy curriculum frameworks and the following:

01. Demonstrate knowledge of selected laboratory operations.
02. Demonstrate knowledge of advanced hematological principles and procedures.
03. Demonstrate knowledge of advanced hemostasis testing.
04. Demonstrate knowledge of advanced microbiological principles and procedures.
05. Demonstrate knowledge of advanced clinical chemistry principles and procedures.
06. Demonstrate knowledge of advanced immunological procedures.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: _______

PROGRAM TITLE: Medical Laboratory Technology (Associate Degree) POSTSECONDARY NUMBER: 0317.030900

01.0 DEMONSTRATE KNOWLEDGE OF SELECTED LABORATORY OPERATIONS -- The student will be able to:

01.01 Apply principles of quality assurance to correct problems encountered in monitoring daily quality control.
01.02 Evaluate laboratory findings and take necessary action to confirm or clarify results according to standard operation procedure.
01.03 Demonstrate knowledge of operation and principles of laboratory instruments.

02.0 DEMONSTRATE KNOWLEDGE OF ADVANCED HEMATOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

02.01 Identify normal and abnormal, immature and mature erythrocytes at each stage of maturation.
02.02 Identify and distinguish between normal, atypical and leukemic leukocytes at each stage of maturation.
02.03 Perform selected cytochemical staining procedures.
02.04 Discuss the principle of and perform hemoglobin electrophoresis with pattern interpretation.

03.0 DEMONSTRATE KNOWLEDGE OF ADVANCED HEMOSTASIS TESTING -- The student will be able to:

03.01 Discuss the principle of substitution testing for factor deficiencies.
03.02 Discuss the principle of specific factor assays.
03.03 Correlate the laboratory test results for fibrinolysis with conditions affecting the fibrinolytic system.
03.04 Discuss specialized platelet function tests.
03.05 Correlate laboratory results with possible inherited and/or acquired coagulation abnormalities.

04.0 DEMONSTRATE KNOWLEDGE OF ADVANCED MICROBIOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

04.01 Discuss procedures for and clinical significance of anaerobe identification.
04.02 Classify fungi and state their clinical significance.
04.03 Perform general techniques used in identifying fungi.
04.04 Identify selected fungi.
04.05 Discuss and perform automated microbiological procedures.
04.06 Identify life cycles, modes of transmission, prevention and pathophysiology of clinically significant parasites.
04.07 Discuss microbial and immunological techniques to identify selected clinically significant viruses.
04.08 Discuss classification and related disease states of clinically significant viruses.
04.09 Identify commonly used antibiotics, their usage and mechanisms of activity.

05.0 DEMONSTRATE KNOWLEDGE OF ADVANCED CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES -- The student will be able to:

05.01 Perform, calculate, analyze and recognize normal/abnormal electrophoresis procedures.
05.02 Perform and calculate results of immunoassay procedures.

05.03 Perform, calculate, and recognize associated disease states for selected isoenzyme assays.
05.04 Perform, calculate, and recognize associated disease states for blood lipid profiles.
05.05 Perform and calculate selected procedures related to endocrine function.
05.06 Perform selected assays for therapeutic and toxic substances.
05.07 Discuss the principles and procedures of blood gas analysis, including arterial specimen collection and clinical significance.

06.0 DEMONSTRATE KNOWLEDGE OF ADVANCED IMMUNOLOGICAL PROCEDURES -- The student will be able to:

06.01 Discuss selected specialty serological tests such as immunofluorescence assays.
06.02 Discuss and interpret antinuclear antibody patterns and their relationship to disease states.

CURRICULUM FRAMEWORK

FLORIDA DEPARTMENT OF EDUCATION

PROGRAM AREA: Health Occupations

EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Medical Laboratory Technology (Certificate)

CODE NUMBER: Secondary ______ Postsecondary H170305

Florida CIP 0317.030500

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____7-9 _____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: TEC MED @ 7 G LAB TECH @ 7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as medical lab technicians (078.381-014) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, didactic and laboratory performance of routine procedures in hematology, immunology, urinalysis, immunohematology, microbiology and clinical chemistry including the use of common laboratory instruments. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

III. SPECIAL NOTE: Duly chartered medical laboratory professional society student organizations and/or Health Occupations Students of America, Inc., as well as participation in a career related professional organization(s) are appropriate for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The graduate should be prepared to take the appropriate licensing examination to practice in Florida and an appropriate national certifying examination.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 300 hours.

IV. DEFINITIONS

Define: To describe the basic qualities and principles.

Demonstrate: To show by performance, simulation, explanation or illustration.

Identify: To physically select, indicate, or explain verbally/or in writing, using standard terms recognized in the clinical laboratory.

V. INTENDED OUTCOMES:

After successfully completing this program, the student will be able to perform all intended outcomes listed under the Phlebotomy curriculum framework and the following:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Discuss the clinical laboratory in relation to the health care setting.
05. Discuss anatomy and physiology of the human body.
06. Apply quality assurance principles and safety protocols.
07. Demonstrate knowledge of urinalysis principles and procedures.
08. Demonstrate knowledge of hematological principles and procedures.
09. Demonstrate knowledge of hemostasis and related diagnostic principles and procedures.
10. Demonstrate knowledge of microbiological principles and procedures.
11. Demonstrate knowledge of clinical chemistry principles and procedures.
12. Demonstrate knowledge of immunohematological principles and procedures.
13. Demonstrate knowledge of immunological/serological principles and procedures.
14. Demonstrate knowledge of principles and procedures of body fluid analysis.
15. Demonstrate knowledge of the operation of computer systems.
16. Demonstrate knowledge of Immune-Deficiency Diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations
SECONDARY NUMBER: ______

PROGRAM TITLE: Medical Laboratory Technology (Certificate)
POSTSECONDARY NUMBER: H170305

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The students will be able to:

01.01 Identify and use various forms of communication.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Maintain current documentation.
01.06 Demonstrate proper telephone usage.
01.07 Properly identify patients.
01.08 Demonstrate basic computer skills.
01.09 Demonstrate ability to report observations in written or oral form.

02.0 APPLY BASIC MATH SKILLS -- The students will be able to:

02.01 Read, interpret and report on graphs, charts and tables.
02.02 Make and use measurements in both traditional and metric units.
02.03 Make estimates and approximations and judge the reasonableness of the result.
02.04 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS -- The students will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Demonstrate ability to evaluate and draw conclusions.
03.04 Demonstrate knowledge of anatomy and physiology of body systems.

04.0 DISCUSS THE CLINICAL LABORATORY IN RELATION TO THE HEALTH CARE SETTING -- The student will be able to:

04.01 List, classify and discuss various departments and services within the health care setting in which the clinical laboratory must interact.
04.02 Discuss the licensure and certification requirements of the major classifications of clinical laboratory personnel.

05.0 DISCUSS ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY -- The student will be able to:

05.01 Identify the major body systems and their anatomical features.
05.02 Explain the physiological processes in the human system necessary to influence and maintain homeostasis.

06.0 APPLY QUALITY ASSURANCE PRINCIPLES AND SAFETY PROTOCOLS -- The student will be able to:

06.01 Recognize specimen suitability and determine need for rejection/recollection using factors described in clinical protocal.
06.02 Describe special procedures for transporting and processing specimens.
06.03 Describe clinical laboratory role in providing quality assurance in laboratory testing, reporting, and use and maintenance of equipment.
06.04 Perform all required calibration procedures.
06.05 Perform and record all quality control procedures required for the tests assayed and recognize unacceptable results.

06.06 Identify and report problems encountered in daily quality control according to standard operating procedures.
06.07 Adhere to current OSHA regulations regarding laboratory hazards.

07.0 DEMONSTRATE KNOWLEDGE OF URINALYSIS PRINCIPLES AND PROCEDURES -- The student will be able to:

07.01 Discuss the renal system as it relates to urinalysis.
07.02 Describe renal function tests.
07.03 Describe principles of and perform routine physical and clinical analyses on urine.
07.04 Prepare, identify and quantitate urine microscopics.
07.05 Correlate abnormal physical, chemical and microscopic urine results with associated pathological conditions.
07.06 Describe collection procedures for random and timed urine specimens.

08.0 DEMONSTRATE KNOWLEDGE OF HEMATOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

08.01 Discuss the organs, cells and cellular interaction of the lymphoid and reticuloendothelial systems.
08.02 Discuss the principles of and perform routine hematology procedures.
08.03 Differentiate normal from abnormal blood cell morphology and relate the abnormal findings to the commonly referenced hematological disorders.
08.04 Identify normal and abnormal molecular structure of hemoglobin and the more common hemoglobinopathies.

09.0 DEMONSTRATE KNOWLEDGE OF HEMOSTASIS AND RELATED DIAGNOSTIC PRINCIPLES AND PROCEDURES -- The student will be able to:

09.01 Discuss and define the interactive systems necessary to maintain hemostasis.
09.02 Describe the principles of and perform routine testing used in the evaluation of the vascular, platelet, coagulation factor and fibrinolytic systems.
09.03 Discuss conditions and commonly referenced diseases related to abnormal hemostasis.

10.0 DEMONSTRATE KNOWLEDGE OF MICROBIOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

10.01 Discuss microbial taxonomy and classification.
10.02 Discuss bacterial metabolism, reproduction, cell structures and their functions.
10.03 Discuss and perform disinfection and sterilization techniques.
10.04 Discuss classification, composition and preparation of culture media.
10.05 Discuss specimen collection, handling, and culturing techniques for urine, stool, wound, throat, body fluids, blood and exudates.
10.06 Perform bacteriologic culture techniques necessary for isolation and identification of organisms.
10.07 Perform and interpret antibiotic susceptibility tests.
10.08 Discuss diseases associated with selected anaerobic and aerobic bacteria.
10.09 Identify commonly encountered aerobic bacteria through morphological, physical and biochemical properties.
10.10 Discuss the principles of, prepare, and interpret Gram stains.
10.11 Discuss collection and handling of specimens for fungal, mycobacterial and viral specimens.
10.12 Prepare and examine specimens, and identify ova and parasites as indicated.

11.0 DEMONSTRATE KNOWLEDGE OF CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES -- The student will be able to:

11.01 Discuss the renal system and related chemistry tests.
11.02 Discuss principles of and perform common renal function tests.
11.03 Discuss carbohydrate, protein and lipid metabolism.
11.04 Discuss principles of and perform commonly ordered tests related to carbohydrate, protein and lipid metabolism.
11.05 Discuss the liver and its functions as related to chemistry tests.
11.06 Discuss principles of and perform commonly ordered liver function tests.
11.07 Discuss enzyme classification, origin, activity and function.
11.08 Discuss principles of and perform commonly ordered enzyme procedures.
11.09 Discuss electrolyte balance as related to health and disease.
11.10 Discuss principles of and perform electrolyte analyses.
11.11 Discuss the physiology of the endocrine system and the principal tests used to determine endocrine function.
11.12 Discuss the role of the laboratory in therapeutic drug monitoring and toxicology.
11.13 Discuss and perform general electrophoresis techniques.
11.14 Demonstrate knowledge of principles of instrumentation as related to the clinical chemistry laboratory.

12.0 DEMONSTRATE KNOWLEDGE OF IMMUNOHEMATOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

12.01 Discuss basic genetics of the antigen system.
12.02 Discuss the ABO, Rh and other blood group systems.
12.03 Perform antigen and antibody testing to establish ABO group and Rh.
12.04 Discuss and perform routine compatibility testing.
12.05 Discuss and perform antibody screening and identification of common single antibodies.
12.06 Discuss donor interview, criteria for selection, phlebotomy preparation, and donor blood processing.
12.07 Identify symptoms of and required laboratory protocol for handling suspected transfusion reactions.
12.08 Discuss immune hemolytic diseases commonly investigated through immunohematological procedures.
12.09 Discuss multiple antibody identification procedures.
12.10 Discuss appropriate absorption and elution techniques.
12.11 Discuss component collection and preparation.

13.0 DEMONSTRATE KNOWLEDGE OF IMMUNOLOGICAL/SEROLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

13.01 Discuss the immune system and the normal immune response.
13.02 Discuss physical and chemical properties of immunoglobulins and complement and their reactions in vitro.
13.03 Discuss the principle of and perform the basic agglutination, flocculation and precipitation procedures in serology.
13.04 Discuss principles of complement fixation, immunoelectrophoresis and enzyme immunoassay.
13.05 Discuss the clinical significance of the commonly performed serological tests.

14.0 DEMONSTRATE KNOWLEDGE OF PRINCIPLES AND PROCEDURES OF BODY FLUID ANALYSIS -- The student will be able to:

14.01 Define and discuss the differences between transudates and exudates.
14.02 Discuss miscellaneous body fluids to include cerebral spinal, seminal and joint fluids.
14.03 Perform physical, chemical and microscopic evaluations of common body fluids.

15.0 DEMONSTRATE KNOWLEDGE OF THE OPERATION OF COMPUTER SYSTEMS

-- The student will be able to:

15.01 Discuss the role of computer systems in laboratory data management.

15.02 Demonstrate knowledge of common computer terminology.

15.03 Perform entry level computer operations for specimen accessioning, data reporting, and quality control recording.

15.04 Demonstrate entry level operational skills in the use of computer-interfaced analytical instrumentation.

16.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS

-- The student will be able to:

16.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.

16.02 Identify community resources and services available to the victims of immune-deficiency diseases.

16.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.

16.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

16.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Medical Record Transcribing

CODE NUMBER: Secondary ________ Postsecondary H170506

Florida CIP 0317.050601

SECONDARY SCHOOL CREDITS ________ COLLEGE CREDITS ________ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

_______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: MED RECTEC @7 G MED TRANS @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as medical record transcriptionists (245.362-010) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, medical terminology, anatomy and physiology, grammar and punctuation, health care delivery systems, health information services, ethical and legal responsibilities, safety/security procedures, word processing/transcription skills and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Practice in a simulated transcription setting is an integral part of this program. Clinical learning experiences are an appropriate part of this program.

III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization for providing leadership training and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program. Students should be encouraged to become members of their professional organization, and participate in the state/local chapter activities. Admissions should be limited to individuals who have the ability to type 30-45 words per minute.

The program should prepare the graduate to take the national examination to become a Certified Medical Transcriptionist.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Reading 10.0, Mathematics, 8.0, Language 10.0, and Reading 10.0. The grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 900 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Use appropriate medical and scientific terminology.
05. Apply rules of English grammar and punctuation.
06. Utilize medical references.
07. Operate word processing/transcription equipment.
08. Describe the health care delivery system.
09. Explain the role of health information services.
10. Demonstrate ethical and legal principles with regard to the use of medical records.
11. Practice safety/security procedures.
12. Use employability skills.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations
SECONDARY NUMBER: ____________

PROGRAM TITLE: Medical Record Transcribing
POSTSECONDARY NUMBER: H170506

01.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

01.01 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
01.02 Distinguish between factual reports and personal opinion.
01.03 Report observations in written and oral form.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 USE APPROPIRATE MEDICAL AND SCIENTIFIC TERMINOLOGY -- The student will be able to:

04.01 Spell, define and pronounce medical words and their components.
04.02 Define and use medical abbreviations.
04.03 Identify and explain structure and function of the human body.
04.04 Identify disorders and treatments of the human body.

05.0 APPLY RULES OF ENGLISH GRAMMAR AND PUNCTUATION -- The student will be able to:

05.01 Recognize and use the principal parts of speech.
05.02 Recognize and use punctuation marks.
05.03 Apply rules of numerical expression.
05.04 Apply rules of capitalization.
05.05 Define and use abbreviations.
05.06 Demonstrate ability to spell words in common usage and use reference sources.
05.07 Edit and proofread transcription.
05.08 Recognize and use report formats.

06.0 UTILIZE MEDICAL REFERENCES -- The student will be able to:

06.01 Use medical dictionaries and speciality word books.
06.02 Identify and use trade, generic and chemical drug names utilizing reference sources.
06.03 Identify and use diagnostic test terminology.

07.0 OPERATE WORD PROCESSING/TRANSCRIPTION EQUIPMENT -- The student will be able to:

07.01 Demonstrate keyboarding skills.
07.02 Demonstrate use of transcriber.
07.03 Transcribe the following: history and physical, consultations, discharge summaries, operative reports and special reports.

08.0 DESCRIBE THE HEALTH CARE DELIVERY SYSTEM
-- The student will be able to:

08.01 Define health as stated by the World Health Organization.
08.02 List factors which influence the health of the individual, nation and world.
08.03 List the responsibilities of national, state and local health agencies.
08.04 Describe the types of health care delivery systems.
08.05 Define the role of the health care consumer.

09.0 EXPLAIN THE ROLE OF HEALTH INFORMATION SERVICES
-- The student will be able to:

09.01 Describe the organizational structure and functions of the medical record department.
09.02 Explain numbering and filing systems used in health care institutions.
09.03 Describe the development and function of the health record.
09.04 Explain the use of the health record by state, federal, accrediting and licensing agencies.

10.0 DEMONSTRATE ETHICAL AND LEGAL PRINCIPLES WITH REGARD TO THE USE OF MEDICAL RECORDS -- The student will be able to:

10.01 Follow confidentiality policy for health information.
10.02 Discuss the Code of Ethics of the American Association for Medical Transcription.
10.03 Discuss the Code of Ethics of the American Medical Record Association.

11.0 PRACTICE SAFETY/SECURITY PROCEDURES -- The student will be able to:

11.01 Participate in emergency or disaster plans.
11.02 Report safety hazards.
11.03 Identify institution's security policies/procedures.
11.04 Practice good body mechanics.

12.0 USE EMPLOYABILITY SKILLS -- The student will be able to:

12.01 Conduct a job search.
12.02 Secure information about a job.
12.03 Identify documents that may be required when applying for a job.
12.04 Complete a job application form.
12.05 Demonstrate competence in job interview techniques.
12.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
12.07 Identify acceptable work habits.
12.08 Demonstrate knowledge of how to make job changes appropriately.
12.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Midwifery

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0318.110300

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ______7-9 ______9-12 Postsecondary Adult Vocational

X Postsecondary Vocational ______ Other ______

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as licensed midwives or to provide supplemental training for persons previously or currently employed in this occupation.

Licensed midwives are prepared to provide care for mothers who are expected to have a normal pregnancy, labor and delivery. Midwifery graduates from approved programs are eligible to take an examination testing proficiency in the core competencies required to practice midwifery as specified in FS 553 - 467.009 ch. 92-179.

Training Requirements FS 467.009 and Ru ch. 10 D 36
An approved midwifery program shall include a course of study and clinical practice for a minimum of 3 years. If the applicant is a registered nurse or a licensed practical nurse or has previous nursing education or practical midwifery education experience, the required period of training may be reduced to the extent of the applicant's qualifications. In no case shall the training be reduced to a period of less than two (2) years.

According to FS 467.009 the content includes, but is not limited to all aspects of prenatal, intrapartal, and post-partal care, including obstetrics; neonatal pediatrics; basic sciences; female reproductive anatomy and physiology; behavioral sciences; childbirth education; community care; epidemiology; genetics; embryology; neonatology; applied pharmacology; the medical and legal aspects of midwifery; gynecology and women's health; family planning; nutrition during pregnancy and lactation; breast feeding and basic nursing skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Simulated practice and clinical experiences are included as an integral part of this program.

Clinical Experience Rules: FS467.009(4)

(1) A student midwife, during training, shall undertake (under the supervision of a preceptor) the care of 50 women in each of the prenatal, intrapartal, and postpartal periods [the same women need not be seen through all three periods].

(2) The student midwife shall observe an additional 25 women in the intrapartal period before qualifying for a license.

(3) The training shall be in hospitals, alternative birth settings or both with particular emphasis on learning to differentiate between low-risk pregnancies or high-risk pregnancies.

(4) It shall be the responsibility of the program to obtain and maintain current contractual agreements with each agency utilized for student clinical training.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Students must take a licensing examination (FS 467.011). Minimal acceptable performance will be determined by The Department of Professional Regulation.

The program must be approved by the Department of Professional Regulation.

Entering students who have completed the program HO 17.060500, Practical Nursing or 0318.110100 Associate Degree Nursing or have obtained an RN through another program should be given appropriate advanced standing.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is three (3) years.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Recognize and utilize three aspects of midwifery management of care for pregnant women.
02. Assume responsibility for rendering antepartum care.
03. Assume responsibility for rendering intrapartum care.
04. Assume responsibility for rendering postpartum care.
05. Assume responsibility for rendering neonatal care.
06. Assumes responsibility for management of care of women seeking family planning and/or gynecologic service.
07. Demonstrate a knowledge of the professional role and responsibilities of midwifery.
08. Demonstrate knowledge of immune deficiency diseases including AIDS.
09. Demonstrate basic nursing/midwifery skills.
10. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS

PROGRAM AREA: Health Occupations

PROGRAM TITLE: Midwifery

EFFECTIVE DATE: July, 1993

SECONDARY NUMBER: _______

POSTSECONDARY NUMBER: _______

01.0 RECOGNIZE & UTILIZE THREE ASPECTS OF MIDWIFERY MANAGEMENT OF CARE FOR PREGNANT WOMEN -- The student will be able to:

01.01 Provide safe, effective basic health care monitoring, management, teaching and referral service for healthy women throughout the normal uncomplicated childbearing experience.
  a) Apply therapeutic communication techniques, including interviewing, counseling, and client teaching.
  b) Demonstrate basic physical assessment skills of observation, palpation, percussion, auscultation and measurement in collecting data describing current health status.
) Perform basic laboratory assessment, including hematocrit, hemoglobin, urine analysis, and vaginal/cervical smears.

01.02 Interpret data to identify current and potential health problems and needs.

01.03 Formulate a complete needs/problem list and establish health care goals in collaboration with the client and her family.

01.04 Identify need for consultation or referral to appropriate members of the health care team in meeting health care goals.

01.05 Provide information and support to enable clients to actively participate in their own health care management.

01.06 Develop, implement and evaluate a comprehensive plan of care with the client based on supportive, scientific rationale.

01.07 Identify those current or potential client problems requiring consultation, referral and/or co-management and obtain consultation promptly or plan and implement collaborative management with other providers.

01.08 Utilize appropriate consultation, collaboration or referral for deviations from normal and potential complications.

01.09 Establish a written protocol with a physician who maintains supervision for directing the specific course of medical treatment for the "at-risk" client.

01.10 Refer and/or transfer care of the client when the need is identified for management outside the scope of the midwife's practice.

02.0 ASSUME RESPONSIBILITY FOR RENDERING ANTEPARTUM CARE -- The student will be able to:

02.01 Utilize principles of basic sciences in rendering antepartum care.

02.02 Provide basic health surveillance, anticipatory guidance and health teaching for healthy women experiencing normal, uncomplicated pregnancies.

02.03 Accurately determine pregancy by history, physical and laboratory findings.

02.04 Assess the physical health status of the client, including preconceptual factors likely to influence this pregnancy.

02.05 Assess the psychosocial status of the client and her support system.

02.06 Identify social, cultural, environmental and occupational factors that influence the client's response to pregnancy and pregnancy related behaviors.

02.07 Assess nutritional status and provide nutritional counseling.

02.08 Differentiate between normal and pathologic adaptations to pregnancy, including hematologic changes and intervene appropriately.

02.09 Identify risk factors requiring consultation and/or referral.

02.10 Demonstrate knowledge of pharmacokinetics in administration of medications commonly used in pregnancy.

02.11 Identify current, potential and emergent problems and needs affecting pregnancy.

02.12 Differentiate between normal physiologic pregnancy, common pregnancy-related discomforts, and pathologic disorders.

02.13 Assist client in managing common minor pregnancy-related discomforts such as fatigue, nausea, heartburn, backache, leg cramps, vaginal discharge, and constipation.

02.14 Provide anticipatory guidance regarding developmental tasks of childbearing, prepared childbirth, lactation/breastfeeding and parenthood.

02.15 Assess fetal well-being, including intrauterine growth, fetal heart rate, and fetal movement through various methods such as fetal movement records, ultrasonography, NST, and OCT.

02.16 Interpret assessment data accurately to determine client and fetal health status.

02.17 Initiate consultation and/or referral as needed to safeguard health of the client and the fetus.

02.18 Discuss options in childbearing sites and practitioners to facilitate client informed choice and consent.

02.19 Refer client to appropriate community agencies, resources and educational referral services as needed.

03.0 ASSUME RESPONSIBILITY FOR RENDERING INTRAPARTUM CARE

-- The student will be able to:

03.01 Utilize principles of the basic sciences in rendering intrapartum care.

03.02 Describe the normal labor process, including mechanisms of labor and birth.

  a) Differentiate between Braxton Hicks contractions, preterm labor and prodromal labor.
  b) Assess frequency, duration, intensity of and interval between contractions.
  c) Identify the status of the membranes.
  d) Identify fetal presentation, position, and heart rate.
  e) Assess cervical effacement and dilation and station of the presentating part.
  f) Differentiate between bloody show and uterine/placental bleeding.

03.03 Demonstrate knowledge of the fetal skull and its critical landmarks.

03.04 Describe parameters and methods for assessing and managing the process of labor and delivery.

03.05 Describe parameters and methods for assessing maternal and fetal status during the stages of labor.

03.06 Demonstrate knowledge of the emotional changes during labor and delivery.

03.07 Provide comfort and support during labor and delivery including non-pharmacologic pain management techniques.

03.08 Describe and demonstrate techniques for spontaneous vaginal delivery and placental expulsion.

03.09 Identify indicators of deviations from normal labor and delivery and utilize appropriate interventions.

03.10 Assess and manage care of the perineum and surrounding tissues.

03.11 Provide immediate care to the newborn, including assessment, maintaining a patent airway and managing thermal instability.

03.12 Demonstrate knowledge of pharmacokinetics and administration of medications commonly used during labor and birth.

03.13 Explain the role and function of the midwife in relation to emergency management.

04.0 ASSUME RESPONSIBILITY FOR RENDERING POSTPARTUM CARE

-- The student will be able to:

04.01 Demonstrate a knowledge of and utilize principles of the basic sciences in rendering postpartum care.

04.02 Demonstrate a knowledge of anatomy and physiology of the puerperium.

04.03 Describe involution, recognize indicators of deviation from normal, and utilize appropriate intervention.

04.04 Teach methods of breast care and lactation to client utilizing anatomy and physiology of lactation.

04.05 Identify the etiology, and manage discomforts of puerperium.

04.06 Identify indicators of deviations from the normal puerperium and utilize appropriate intervention, including consultation and referral.

04.07 Demonstrate knowledge of the pharmacokinetics and administration of medications commonly used during the puerperium.

04.08 Describe the nutritional requirements of the postpartum period.

04.09 Describe the purpose and process of completing and filing a birth certificate according to Florida law.

04.10 Recognize and respond appropriately to the emotional and psychosocial changes during the puerperium.

04.11 Provide anticipatory guidance regarding client self care, infant care, family planning and alterations in family roles and expectations.

04.12 Describe and utilize appropriate screening/diagnostic tests during puerperium.

05.0 ASSUME RESPONSIBILITY FOR RENDERING NEONATAL CARE -- The student will be able to:

05.01 Demonstrate a knowledge and utilize principles of the basic sciences in rendering neonatal care.

05.02 Manage the health care of the normal infant during the neonatal period and initiate consultation and referral as appropriate.

05.03 Explain anatomical and physiological adaptation to extrauterine life and stabilization of the neonate.

05.04 Facilitate adaptation to extra-uterine life including resuscitation and emergency care of the newborn.

05.05 Assess neonatal status (physical, emotional and psychosocial).

05.06 Recognize deviations from normal neonatal status and initiate appropriate intervention, management and/or referral.

05.07 Describe the components of breast milk and formula, the nutritional needs of the neonate and relationship of feeding methods to physiological, immunological and psychological development.

05.08 Demonstrate the pharmacokinetics and administration of medications and the treatments commonly used for the neonate.

05.09 Describe the rationale and methodology for the common screening/diagnostic tests performed on the neonate and utilize those appropriate to scope of practice.

05.10 Describe the factors influencing neonatal behavior and parental interaction and attachment.

05.11 Anticipate need for and provide appropriate guidance regarding infant care, breast feeding and family relationships, to include referral to community resources.

06.0 ASSUME RESPONSIBILITY FOR MANAGEMENT OF CARE OF WOMEN SEEKING FAMILY PLANNING AND/OR GYNECOLOGIC SERVICE -- The student will be able to:

06.01 Demonstrate a knowledge of and utilize principles of the basic sciences in rendering family planning and/or gynecologic service.

06.02 Explain anatomy and physiology of male and female reproductive systems throughout the life cycle.

06.03 Explain anatomy, physiology and psychosocial components of human sexuality.

06.04 Recognize and respond appropriately to indications of need for sexual counseling and/or referral.

06.05 Provide counseling regarding general health promotion, as well as measures related to developmental changes throughout the life cycle.

06.06 Describe rationale and methods for common gynecological and pregnancy screening and diagnostic tests, utilizing those appropriate to scope of practice.
06.07 Describe factors relating to male and female barrier, steroidal, mechanical, chemical, physiologic and surgical conception control methods, including fertility awareness.
06.08 Explain factors involved in decision making regarding unplanned or undesired pregnancies and resources for counseling and referral, including preconceptual counseling.
06.09 Identify and describe deviations from normal status and provide appropriate preventive measures and/or interventions for selected pathology.

07.0 DEMONSTRATE KNOWLEDGE OF THE PROFESSIONAL ROLE AND RESPONSIBILITIES OF THE MIDWIFE -- The student will be able to:

07.01 Describe the historical development and present status of midwifery in Florida, nationally, and internationally.
07.02 Describe and practice within the laws, rules, regulations and public policies affecting midwifery practice including malpractice and litigation issues.
07.03 Describe and utilize codes and guidelines for ethical and professional behavior, including those set by state and national professional organizations.
07.04 Describe the midwife's responsibility for ongoing self evalation, participation in quality assurance and maintenance of currency in practice, including continuing education.
07.05 Demonstrate understanding of various sites, styles and modes of practice within midwifery - the delivery of ethnic and culturally sensitive care.
07.06 Promote health care as educator, client advocate, health care provider, social/political change agent and collaborator with other health team members.
07.07 Recognize and report signs of substance abuse, family violence and child abuse/neglect as required.
07.08 Demonstrate respect for the dignity and rights of clients and other health care providers, including client's privacy and confidentiality.

08.0 DEMONSTRATE KNOWLEDGE OF IMMUNE DEFICIENCY DISEASES INCLUDING AIDS -- The student will be able to:

08.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
08.02 Identify community resources and services available to the individuals and families with the immune-deficiency disease AIDS.
08.03 Identify high-risk behaviors that promote the spread of AIDS and the public education needed to combat its spread.
08.04 Follow the Centers for Disease Control (CDC) guidelines associated with the transmission of AIDS.
08.05 Identify the legal and ethical aspects of AIDS.
08.06 Explain the implications of HIV infection and seropositive tests in pregnancy, childbirth, lactation, child care and seroconversion among children of HIV positive parents.
08.07 Identify established protocals for caregivers who are at risk for contact with patients with immune deficiency diseases, including AIDS.

09.0 PROVIDE BASIC NURSING/MIDWIFERY SKILLS -- The student will be able to:

09.01 Collect appropriate data base describing current health status, including complete history, physical and psychosocial assessment.
09.02 Obtain and interpret relevant laboratory data.
09.03 Promote and maintain a safe and therapeutic environment.
09.04 Implement and maintain medical and surgical asepsis.

09.05 Use proper body mechanics.
09.06 Recognize changes in a client's condition requiring intervention with basic safety measures, including emergency interventions as specified by statute/rule.
09.07 Administer and/or supervise complete hygienic care.
09.08 Perform comfort measures such as backrub, relaxation techniques, and diversional activities.
09.09 Assess nutritional status and utilize therapeutic principles of nutrition.
09.10 Assess client elimination needs and utilize therapeutic principles of elimination such as catheterization and enemas.
09.11 Prepare and administer medications as specified by statute/rule and assess client response.
09.12 Utilize appropriate medical terminology and abbreviations.
09.13 Chart and maintain client files.
09.14 Utilize problem solving skills and judgement in midwifery practice.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

10.01 Conduct a search of available midwifery career options.
10.02 Secure information about a professional position as a midwife.
10.03 Identify documents that may be required when applying for a midwifery position.
10.04 Complete an application for employment.
10.05 Demonstrate competence in employment interview techniques.
10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
10.07 Identify acceptable professional work behavior.
10.08 Demonstrate knowledge of how to appropriately make career changes.
10.09 Describe the importance of working effectively as part of a health care team.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Nuclear Medicine Technology

CODE NUMBER: Secondary _______ Postsecondary _______

Florida CIP 0317.020800

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

x Postsecondary Vocational ______ Other ____________________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as radiologic technologists, nuclear medicine or nuclear medical technologists (32914218), (078.361-018), or to provide supplemental training for persons previously or currently employed in these occupations.

The nuclear medicine technologist performs patient care with understanding of patient's special needs, fears and concerns and recognizes changes in patient condition. Limiting the exposure of the patient and other health care workers to minimal levels of radiation is of paramount importance.

The content includes, but is not limited to, the utilization of radioactive materials for diagnostic and therapeutic procedures, patient care, administrative functions, health and safety including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

A fundamental knowledge and understanding of the physical and biological sciences, including radiation biology and protection, as well as radiopharmaceuticals "in vivo" and "in vitro", is essential: nuclear physics, biochemistry, immunology, physiology and an introduction to computer application/operation with data manipulation must be included.

II. LABORATORY ACTIVITIES: Simulation activities are utilized extensively to prepare students for real clinical experiences which are integrated with the didactic portion of the program. Equipment used must be similar to that used in hospitals.

A clinical practicum where students work with patients under competent medical direction and close supervision by qualified technologists, NMTCB, or ARRT(N). An effective ratio of students to clinical instructors must be maintained at all times.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for developing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students should be encouraged to belong to their professional association.

The program must be accredited by the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The program must be approved by the Department of Health & Rehabilitative

Services so that the graduate is eligible to be licensed in Florida as a Certified Radiologic Technologist - Nuclear Medicine.

The typical length of this program for an average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Perform patient care.
02. Practice radiation safety.
03. Practice basic radiopharmacy.
04. Calculate doses and administer radiopharmaceuticals.
05. Perform "in vitro"/"in vivo" nonimaging procedures.
06. Perform imaging procedures.
07. Perform computerized procedures.
08. Practice quality control.
09. Demonstrate employability skills.
10. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS   EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations   SECONDARY NUMBER: ______

PROGRAM TITLE: Nuclear Medicine Technology   POSTSECONDARY NUMBER: 0317.020800

01.0 PERFORM PATIENT CARE -- The student will be able to:

01.01 Perform cardiopulmonary resuscitation and first aid.
01.02 Determine vital signs.
01.03 Provide for patient comfort before, during and after procedures.
01.04 Communicate effectively.
01.05 Provide for safe and sanitary conditions.
01.06 Monitor and maintain life support equipment.
01.07 Take and record case histories.
01.08 Recognize and report signs of abuse and neglect.
01.09 Apply infection control techniques following Center for Disease Control (CDC) guidelines.

02.0 PRACTICE RADIATION SAFETY -- The student will be able to:

02.01 Assure compliance with local, state and federal regulations.
02.02 Follow appropriate protection procedures.
02.03 Perform area surveys and wipe tests.
02.04 Perform decontamination procedures.
02.05 Appropriately dispose of radioactive waste.
02.06 Follow approved procedures for identifying and labeling.
02.07 Practice personnel monitoring of radiation exposure.

03.0 PRACTICE BASIC RADIOPHARMACY -- The student will be able to:

03.01 Maintain radiopharmaceutical laboratory records and materials.
03.02 Obtain generator eluate.
03.03 Prepare radiopharmaceuticals and perform quality control tests.
03.04 Appropriately dispose of radioactive waste.
03.05 Demonstrate understanding of ordering pharmaceuticals in appropriate dosage and effective time frame.

04.0 CALCULATE DOSES AND ADMINISTER RADIOPHARMACEUTICALS -- The student will be able to:

04.01 Assay radiopharmaceuticals.
04.02 Calculate doses.
04.03 Dispense exact doses.
04.04 Properly administer radiopharmaceuticals.
04.05 Maintain records of administrations/preparations.
04.06 Perform dose calibrator quality control tests.

05.0 PERFORM "IN VITRO"/"IN VIVO" NONIMAGING PROCEDURES -- The student will be able to:

05.01 Operate conventional laboratory equipment.
05.02 Prepare doses and standards.
05.03 Collect specimens.
05.04 Operate radiation detection equipment.
05.05 Perform calculations.
05.06 Perform radioassays.
05.07 Perform venipuncture accurately and efficiently.

06.0 PERFORM IMAGING PROCEDURES -- The student will be able to:

06.01 Prepare patients.
06.02 Select imaging parameters.
06.03 Position patients and obtain images.
06.04 Perform data processing.

06.05 Maintain appropriate records.

07.0 PERFORM COMPUTERIZED PROCEDURES -- The student will be able to:

07.01 Retrieve patient studies and display on computer video screen.
07.02 Select proper protocol and process data.
07.03 Acquire and store patient studies for future reference.
07.04 Manipulate computer data for appropriate display.

08.0 PRACTICE QUALITY CONTROL -- The student will be able to:

08.01 Perform quality assurance testing of imaging systems.
08.02 Calibrate and operate scintillation counters.
08.03 Calibrate and operate gas-filled detectors.
08.04 Perform quality assurance testing of routine imaging and assay procedures.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate acceptable employee health habits.
09.10 Compile a comprehensive resume.
09.11 Demonstrate good interpersonal relationships with others in the clinical environment.
09.12 Recognize the need for continuing education to up-date knowledge and skills.

10.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
10.02 Identify community resources and services available to the victims of immune-deficiency diseases.
10.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
10.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Nursing Assistant

CODE NUMBER: Secondary 8418100 Postsecondary H170602

Florida CIP 0317.060200

SECONDARY SCHOOL CREDITS 1 COLLEGE CREDITS _ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): __ 7-9 __ 9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 11-12, 30-31

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as nursing assistant (66008439), (355.674-014), nurse aides, in nursing homes, or to provide supplemental training for persons previously or currently employed in these occupations. Successful completion of the program from an approved school prepares the student for certification for employment as a Nursing Assistant in a nursing home, in accordance with Chapter 82-163, Florida Statutes.

The content includes, but is not limited to, interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work, gerontology, nutrition, pet-facilitated therapy, health and safety including Cardio-pulmondary Resusciatation (CPR)--heart saver level, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Students will perform nursing skills in the clinical and/or simulated laboratory settings under the supervision of a qualified registered nurse instructor. Clinical and simulated laboratory learning experiences must correlate with didactic instruction.

For nursing assistant certification a minimum of 40 hours clinical and/or cooperative education learning experiences must be obtained. Twenty hours of this clinical experience must be in a licensed nursing home.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, a training plan, which includes the instructional objectives, the skills and tasks relevant to the chosen career goal, and any equipment that will be used, is required. The plan is to be signed by the student, the instructor, and the employer. The student must receive compensation for work performed.

It is recommended that when the cooperative method of instruction is used, the on-the-job training portion will be offered in addition to the 120 hours. It is recommended that students be checked off as competent in the required skills before receiving the state certificate.

In accordance with Section 233.0695 F.S., minimum basic-skills grade levels required for this postsecondary adult vocational program are Mathematics 6.0, Language 7.0 and Reading 7.0. These grade level numbers correspond to grade equivalent scores obtained on state-designated basic-skills examinations.

The approximate length of this program for the average achieving student is 150 hours, but must not be less than 120 hours.

The particular outcomes and student performance standards that the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered, in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP. Completion of this program should enable the postsecondary student to be given advanced standing in the Patient Care Assistant program HCP0600.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

IV. INTENDED OUTCOMES: After successfully completing the program, the student will be able to:

01. Demonstrate application of basic math skills.
02. Demonstrate basic competencies in science.
03. Use verbal and written communication.
04. Demonstrate legal and ethical responsibilities.
05. Provide emergency care.
06. Describe the anatomy and physiology of the human body.
07. Perform physical comfort and safety functions.
08. Provide personal patient care.
09. Perform nursing procedures.
10. Apply principles of nutrition.
11. Provide care for geriatric patients.
12. Apply the principles of infection control.
13. Provide biological, psychological, and social support.
14. Perform supervised management functions, following the patient plan of care.
15. Assist with restorative (rehabilitative) activities.
16. Demonstrate employability skills.
17. Demonstrate knowledge of the immune-deficiency disease AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8418100
PROGRAM TITLE: Nursing Assistant POSTSECONDARY NUMBER: H170602

01.0 DEMONSTRATE APPLICATION OF BASIC MATH SKILLS -- The students will be able to:

01.01 Draw, read, analyze, and report on graphs, charts, and tables.
01.02 Measure time, temperature, distance, capacity, and mass/weight.
01.03 Use measurements in both traditional and metric units.
01.04 Make estimates and judge the reasonableness of the result.

02.0 DEMONSTRATE BASIC COMPETENCIES IN SCIENCE -- The students will be able to:

02.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
02.02 Organize and communicate the results obtained by observation and experimentation.
02.03 Evaluate and draw conclusions.

03.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

03.01 Distinguish between factual reports and personal opinion.
03.02 Identify and use various forms of communication.
03.03 Identify barriers to communication.
03.04 Use basic medical terminology and approved abbreviations.
03.05 Demonstrate effective interpersonal relationships.
03.06 Receive and give oral reports of a patient's status.
03.07 Report and record objective, pertinent observations, in written or oral form.
03.08 Maintain current documentation.
03.09 Obtain specified data from patient and family.
03.10 Utilize verbal and written information to assist with the patient's plan of care.
03.11 Demonstrate basic computer skills.
03.12 Communicate effectively via telephone (e.g., take messages, give appropriate information, and transfer calls).

04.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

04.01 Demonstrate legal and ethical behavior within the role and scope of nursing assistant responsibilities.
04.02 Identify the role of each health-care team member.
04.03 Explain the patient's "Bill of Rights."
04.04 Maintain confidentiality of patient information.
04.05 Describe the purpose of the chain of command (i.e.,to resolve patient or employee problems).
04.06 Follow policies and procedures affecting the health, safety, and well-being of patients.
04.07 Recognize and report signs and symptoms of abuse and neglect.
04.08 Recognize and report signs of substance abuse.
04.09 Follow legal guidelines in charting.
04.10 Exhibit behavior supporting and promoting residents' rights.

05.0 PROVIDE EMERGENCY CARE -- The student will be able to:

05.01 Perform emergency measures, including CPR (heartsaver) and the management of an obstructed airway.
05.02 Identify emergency evacuation procedures.

06.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY
-- The student will be able to:

06.01 Describe the basic structure and function of body systems.
06.02 Describe the relationships of body systems in providing patient care.

07.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS
-- The student will be able to:

07.01 Care for equipment and supplies.
07.02 Maintain patient units.
07.03 Maintain service areas on the units.
07.04 Observe and report the patient's behavior daily, including mental awareness.
07.05 Adjust bed and siderails.
07.06 Lift, hold, or transfer a patient, using good body mechanics.
07.07 Transfer patient, using mechanical lifters.
07.08 Transfer patient to stretcher.
07.09 Turn and position patient.
07.10 Apply protective devices as directed (e.g., vest and belt).
07.11 Apply comfort devices as directed (e.g., footboard, overbed cradle, alternating pressure mattress).
07.12 Assist patient to dangle.
07.13 Assist patient in ambulation, including the use of crutch, cane, or walker.
07.14 Assist patient in using wheelchair.
07.15 Assist patient with care and use of prosthetic/orthotic devices.
07.16 Administer back rub.

08.0 PROVIDE PERSONAL PATIENT CARE -- The student will be able to:

08.01 Give bed bath.
08.02 Assist with shower or tub bath, including the use of specialty tubs.
08.03 Assist patient with sink, tub, shower, or bed shampoo.
08.04 Shave patient.
08.05 Groom patient, including hair, skin, foot, and nail care.
08.06 Assist with and/or administer oral hygiene.
08.07 Assist patient with toileting.
08.08 Assist patient to dress.
08.09 Assist patient with meals.
08.10 Provide bowel and bladder training.
08.11 Give perineal care.

09.0 PERFORM NURSING PROCEDURES -- The student will be able to:

09.01 Admit patient.
09.02 Transfer patient.
09.03 Discharge patient.
09.04 Make unoccupied/occupied bed.
09.05 Measure and record patient's pulse and respiration.
09.06 Measure and record patient's blood pressure.
09.07 Measure and record patient's temperature.
09.08 Measure and record patient's height and weight.
09.09 Assist patient in passive range-of-motion exercises.
09.10 Apply anti-embolic hose.
09.11 Collect, strain, and/or test routine urine specimen.
09.12 Collect timed urine specimen.
09.13 Monitor catheter drainage system.
09.14 Collect clean-catch (midstream-voided) urine specimen.
09.15 Monitor fluid intake and output (I&O).
09.16 Observe, record, and report patient's emesis.
09.17 Assist patient with sitz bath.
09.18 Monitor and assist with care of catheters.
09.19 Assist with ostomy care.
09.20 Collect stool specimen.

09.21 Perform postmortem care.
09.22 Maintain patient-belongings list.
09.23 Administer prepackaged enema of five ounces or less.

10.0 APPLY PRINCIPLES OF NUTRITION -- The student will be able to:

10.01 Identify nutrients and food groups.
10.02 Explain regional, cultural, and religious food preferences.
10.03 Describe special diets.
10.04 Prepare a basic food plan.
10.05 Check patient's diet tray for accuracy.
10.06 Identify methods of maintaining fluid balance.

11.0 PROVIDE CARE FOR GERIATRIC PATIENTS -- The student will be able to:

11.01 Identify safety principles as related to the elderly.
11.02 Describe general characteristics, particular needs, and problems of the elderly.
11.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
11.04 Distinguish between fact and fallacy about the aging process.
11.05 Identify community resources and services available to the elderly.
11.06 Apply Reality Orientation Techniques and Validation Therapy.
11.07 Provide and involve patients in diversional activities.
11.08 Identify common alterations in elderly patient behavior.
11.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

12.0 APPLY THE PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

12.01 Wash hands.
12.02 Provide care for patients with infectious diseases.
12.03 Practice Universal Precautions according to the Centers for Disease Control guidelines.
12.04 Set up isolation unit.
12.05 Follow isolation procedure with food tray, garments, and other materials.
12.06 Collect specimen from patient in isolation.

13.0 PROVIDE BIOLOGIAL, PSYCHOLOCIAL, AND SOCIAL SUPPORT -- The student will be able to:

13.01 Identify basic human needs.
13.02 Discuss family roles and their significance to health.
13.03 List community resources for individual and family health.
13.04 Identify components of the grief process.
13.05 Respond to patient and family emotional needs.

14.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE -- The student will be able to:

14.01 Organize patient-care assignments.
14.02 Complete assignments accurately and in a timely manner.

15.0 ASSIST WITH RESTORATIVE (REHABILITATIVE) ACTIVITIES -- The student will be able to:

15.01 List the purposes of restorative (rehabilitation) program.
15.02 Assist patient with specified restorative (rehabilitation) needs.
15.03 Assist patients/residents to reach the optimum level of independence.

16.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

16.01 Conduct a job search.
16.02 Secure information about a job.
16.03 Identify documents that may be required when applying for a job.
16.04 Complete a job application.
16.05 Demonstrate competence in job-interview techniques.
16.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
16.07 Identify acceptable work habits.
16.08 Demonstrate knowledge of how to make job changes appropriately.
16.09 Demonstrate acceptable employee health habits.

17.0 DEMONSTRATE KNOWLEDGE OF THE IMMUNE-DEFICIENCY DISEASE AIDS -- The student will be able to:

17.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
17.02 Identify community resources and services available to the victims of the immune-deficiency disease AIDS.
17.03 Identify risky behaviors that promote the spread of AIDS and the public education needed to combat its spread.
17.04 Follow the Centers for Disease Control (CDC) guidelines to prevent the spread of AIDS.
17.05 Identify the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Nursing (Associate Degree) R.N.

CODE NUMBER: Secondary _______ Postsecondary _______

Florida CIP 0318.110100

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

x Postsecondary Vocational _____ Other __________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as nurses, registered nurses (32502167), head nurses (075.127-018), private duty nurses (075.374-018), or staff nurses (075.374-022), general duty nurse (075.374-010), or to provide supplemental training for persons previously or currently employed in these occupations.

Associate degree nurses (ADN) are prepared to provide client services in a variety of settings. They administer care to clients experiencing defined health problems with predictable outcomes. ADN graduates are eligible to write the National Council Licensing Examination (NCLEX) for registered nurses, which predominantly tests the knowledge needed to give safe care to clients in the settings specific to the practice of associate degree graduates.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through classroom instruction and applied laboratory procedures or practice.

The location of the ADN program within the community college setting provides an appropriate academic environment for instruction in the biological, physical, social, and behavioral sciences. The community college setting further provides instruction in the communication skills basic to the successful performance of the ADN graduate in the work setting. This body of knowledge supports concepts specific to the practice of nursing.

According to the Florida Nurse Practice Act (Chapter 464, FS) and as set forth by the Florida Board of Nursing rules, Chapter 210, instruction shall include, but not be limited to, the following:

1. Theoretical instruction and clinical experience in medical, surgical, obstetric, pediatric, geriatric and psychiatric nursing. There shall be instruction and clinical experience in both acute and long-term care situations.

2. Theoretical instruction and clinical application of nursing process, human growth and development through the life span, cultural diversity, community health concepts, pharmacology and administration of medications, nutrition, legal aspects of practice, interpersonal relationship and leadership skills, professional role and function, health teaching and counseling skills and current issues in nursing practice.

3. 210-7.25 Curriculum Guidelines

In order to ensure the preparation of nurses capable of competent practice, the curriculum shall:

a. Reflect the stated philosophy and objectives of the program.
b. Evidence an organized pattern of instruction consistent with principles of learning and sound educational practices.
c. Provide for systematic evaluation of student learning in both clinical experiences and effectiveness of graduate performance.
d. Evidence ongoing program evaluation in relation to currency of content, competency of instruction, adequacy of clinical experiences and effectiveness of graduate performance.
e. Include clinical learning experience sufficient to develop nursing skills required for safe practice.

II. LABORATORY ACTIVITIES: Clinical instruction of nursing students will meet the rules of the Florida Board of Nursing as specified in Chapter 210.

210-7.27 Clinical Training

1. Clinical learning experiences shall be an integral part of the total curriculum plan and show relationship to concurrent theory.

2. Clinical experiences based on program objectives may be planned so that the student shall gain clinical experience on all shifts within the twenty-four (24) hour period.

3. The faculty shall select clinical experience and provide students with effective guidance and supervision in clinical learning.

4. Each student providing direct care to clients in a health care agency shall be under the supervision of a faculty member. Faculty should be responsible for supervising students on no more than two units during one clinical instruction period.

5. No more than twelve students shall be assigned to a faculty member for supervision in providing direct care to clients for any one clinical instruction period.

6. Faculty shall be physically present within the agency while students are engaged in providing direct care to clients.

7. Faculty shall be immediately available by telephone to students engaged in an observational experience or assigned to family-community health experiences.

8. Clinical facilities utilized for clinical training by students of approved programs shall provide evidence satisfactory to the Board that they meet the following requirements:

    a. Current State licensure/certification.
    b. The director of nurses or person responsible for nursing services is a registered nurse currently licensed in Florida.
    c. The number and variety of clients are sufficient to meet clinical learning objectives of the nursing program.
    d. There is nursing personnel, sufficient in number, currently licensed and appropriately qualified, to ensure that patients receive safe and effective care at all times.
    e. There are written job descriptions for all categories of nursing personnel which are used as a basis for assigning responsibilities.
    f. Appropriate references and current practice and procedure manuals are available on the floor where students receive experience.

9. Nursing programs shall seek prior approval from the Board for any

clinical facility utilized for student clinical instruction.

10. It shall be the responsibility of the nursing program to obtain and maintain current contractual agreements with each agency utilized for student clinical training to ensure that the nursing program can provide the appropriate clinical experiences necessary to fulfill the requirements of these rules.

11. When more than one nursing program is using an agency for student clinical experience, there shall be written documentation of cooperative planning among the programs and the agency.

12. Preceptorships may be included in a professional curriculum when they meet all the following requirements:

    a. Written objectives are specified and given to the preceptor prior to the experience.
    b. The preceptor is approved by the faculty of the program.
    c. The preceptor shall have clinical expertise and competence in the area where serving as a preceptor.
    d. The preceptor shall be physically present in the unit and available to the student at times the student is performingin a nursing capacity with patients and clients.
    e. The preceptor shall be assigned no more than two (2) students for any preceptor experience.
    f. The student shall be enrolled in the course of the program in which the preceptor experience is a part and shall not be reimbursed for nursing services from the agency in which the experience is received.
    g. Each student shall have a designated program faculty member who supervises the student and is readily available to the student during the time the student is performing in a nursing capacity with patients and clients.
    h. The student shall have received clinical and theoretical instruction in all areas of nursing specified in Rule 210-7.025 (2) prior to any preceptor experience.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc. is an appropriate vocational student organization. The Florida Nursing Student Association or the Florida Organization for the Advancement of Associate Degree Nursing is the appropriate student professional organization.

The program must be approved by the Florida Board of Nursing. It is important that each associate degree nursing program effectively utilize the services of an active program advisory committee composed of representative employers. Only when the educators and employers work together can the associate degree nursing graduate be provided the competencies that are most needed for successful employment as a new registered nurse.

Entering students who have successfully completed the program HO17.060500, Practical Nursing, should be given appropriate advanced standing.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Utilize the nursing process and apply concepts of human growth and development, cultural diversity and scientific principles in giving care.
02. Utilize communication skills to interact with persons in the clinical setting, clients' families, significant others, health teams, and agency representatives, and become familiar with

computer systems.
03. Provide basic nursing skills adapted to common, recurring illness in specific nursing situations.
04. Provide emergency care.
05. Participate as a member of the health care team.
06. Demonstrate a commitment to self-growth, practicing within the framework of the profession's legal and ethical responsibilities.
07. Suggest and adapt to constructive changes in the health care delivery system through appropriate channels.
08. Demonstrate employability skills.
09. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations
SECONDARY NUMBER: ______

PROGRAM TITLE: Nursing (Associate Degree) R.N.
POSTSECONDARY NUMBER: 0318.110100

01.0 UTILIZE THE NURSING PROCESS AND APPLY CONCEPTS OF HUMAN GROWTH AND DEVELOPMENT, CULTURAL DIVERSITY AND SCIENTIFIC PRINCIPLES IN GIVING CARE. -- The student will be able to:

01.01 Take nursing history.
01.02 Assess client needs including but not limited to the following:
  (a) Monitor, interpret, report and record vital signs, weight, and body measurements, fluid balance, skin color, condition and temperature, mental health status, intake and output normal vs gross abnormal results of diagnostic tests including EKG, and normal vs gross abnormal heart, lung and bowel sounds.
  (b) Assess client's environment
  (c) Recognize common alteration in client's physiological status
  (d) Recognize common alterations in client's psychological status
02.03 Develop nursing diagnoses.
01.04 Develop care plan.
01.05 Implement according to priority needs.
01.06 Evaluate and document according to standards of care.
01.07 Modify plan according to changes in client.

02.0 UTILIZE COMMUNICATION SKILLS TO INTERACT WITH PERSONS IN THE CLINICAL SETTING, PATIENTS' FAMILIES, SIGNIFICANT OTHERS, HEALTH TEAMS, AND AGENCY REPRESENTATIVES, AND BECOME FAMILIAR WITH COMPUTER SYSTEMS -- The student will be able to:

02.01 Establish and maintain rapport with members of the health care team.
02.02 Utilize therapeutic communication skills (i.e., data collection, active listening, information giving, and problem solving).
02.03 Communicate the needs of the client with the physician and other members of the health care team.
02.04 Collaborate with the multidisciplinary team in providing client care.
02.05 Record pertinent data on client's clinical record according to agency policy and procedure.
02.06 Report pertinent data to appropriate personnel in a timely fashion.
02.07 Provide report to oncoming staff based on client progress identification.
02.08 Participate in the referral process to health/social agencies.
02.09 Teach clients and families appropriate self-care and health maintenance measures.
02.10 Initiate the discharge planning process.

03.0 PROVIDE BASIC NURSING SKILLS ADAPTED TO SPECIFIC COMMON, RECURRING ILLNESS IN NURSING SITUATIONS -- The student will be able to:

03.01 Promote and maintain a safe and therapeutic environment.
03.02 Implement and maintain medical and surgical asepsis.
03.03 Use proper body mechanics.
03.04 Recognize changes in a client's condition requiring intervention with basic safety measures.
03.05 Recognize and question safety of prescribed care.
03.06 Administer and/or supervise complete hygienic care.
03.07 Administer, teach and supervise activities of daily living.
03.08 Teach, direct and assist with client mobility and maintenance of correct body alignment.

03.09 Maintain immobilization and support using, but not limited to, casts, traction, splints, special beds/frames, slings, bandages, binders, and/or antiembolism stockings.
03.10 Perform comfort measures such as backrub, relaxation techniques and recreational, diversional activities.
03.11 Assess client's nutritional status and utilize therapeutic principles of nutrition and diet therapy.
03.12 Assess client elimination needs and utilize therapeutic principles of elimination including, but not limited to, catheterization and catheter care, ostomy care and enemas.
03.13 Assess cardio-respiratory status and perform therapeutic cardio-respiratory procedures such as maintenance of oxygen therapy, suctioning, tracheostomy care, coughing and deep breathing, special positioning and care of clients with chest tubes.
03.14 Safely apply heat and cold treatments.
03.15 Prepare and administer medications as prescribed by the physician utilizing the prescribed route.
    (a) Initiate, maintain and discontinue intravenous therapy and medication.
    (b) Assess client's status before during and after medication and intervene appropriately.
03.16 Prepare the client for and assist with diagnostic and therapeutic procedures.

04.0 PROVIDE EMERGENCY CARE -- The student will be able to:

04.01 Perform CPR.
04.02 Apply nursing principles/knowledge in emergency/disaster situation.

05.0 PARTICIPATE AS A MEMBER OF THE NURSING TEAM -- The student will be able to:

05.01 Demonstrate beginning skills in leading a nursing team of other health personnel in the total nursing care of a group of clients.
05.02 Plan and give total nursing care in primary care unit.
05.03 Participate in client care conferences.
05.04 Demonstrate beginning skills in leading a team conference.
05.05 Make client rounds.
05.06 Transcribe client orders.
05.07 Find and use community resources specific to client needs.

06.0 DEMONSTRATE A COMMITMENT TO SELF-GROWTH, PRACTICING WITHIN THE FRAMEWORK OF THE PROFESSION'S LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

06.01 Accept responsibility for his/her own behavior.
06.02 Take responsibility for continued learning.
06.03 Recognize and initiate constructive action for own limitations.
06.04 Accept responsibility for own physiological and psychological wellness.

07.0 SUGGEST AND ADAPT TO CONSTRUCTIVE CHANGES IN THE HEALTH CARE DELIVERY SYSTEM THROUGH APPROPRIATE CHANNELS -- The student will be able to:

07.01 Describe and provide input into nursing service.
07.02 Describe and provide input into legislation.
07.03 Describe and provide input into professional organizations.
07.04 Describe and provide input into education.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

08.01 Conduct a job search.
08.02 Secure information about a job.
08.03 Identify documents that may be required when applying for a job.
08.04 Complete a job application.
08.05 Demonstrate competence in job interview techniques.

08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
08.07 Identify acceptable work habits.
08.08 Demonstrate knowledge of how to make job changes appropriately.
08.09 Demonstrate acceptable employee health habits.

09.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

09.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including the Human Imunodeficiency Virus (HIV) infection.
09.02 Identify community resources and services available to the victims of immune-deficiency diseases.
09.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
09.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
09.05 Demonstrate knowledge of the legal aspects AIDS.

* In selected instances where clinical experience is not readily available, evaluation will be achieved in a simulated laboratory experience.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Occupational Therapy Assistant

CODE NUMBER: Secondary _______ Postsecondary ______

Florida CIP 0317.080800

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other _______

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as occupational therapy assistants (66021441), (076.364-010), or to provide supplemental training for persons previously or currently employed in this occupation.

The program prepares students to assist an occupational therapist in implementing the plan of therapy for a patient prescribed by a physician.

The content includes, but is not limited to, communication and interpersonal skills, health-illness-health concepts, specific life tasks and skills, occupational therapy principles and application, and employability skills, health and safety including CPR, anatomy and physiology, kinesiology, psychology, sociology, and gerontology.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: The occupational therapy activity lab should provide students practice in dressing, bathing, feeding, kitchen and home-making activities, and techniques for the disabled; acquaint the students with splinting and bracing methods and materials, slings, and splinting substitutes; acquaint the students with sources of supplies and adaptive equipment and the care and maintenance of same; and enable the students to acquire skills in life tasks and activities.

III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The program should meet the guidelines of the American Occupational Therapy Association so that program completers will be eligible to take the national certification examination administered by the American Occupational Therapy Association. Florida requires licensing of graduates by the Department of Professional Regulation through the Florida Board of Medical Examiners for persons completing programs approved by the American Occupational Therapy Association.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Student must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate ability to communicate and use interpersonal skills effectively.
02. Demonstrate an understanding of and apply health-illness-health concepts.
03. Analyze and apply learned skills in specific life tasks and activities.
04. Apply occupational therapy principles in patient/client relationship.
05. Demonstrate employability skills.
06. Demonstrate knowledge of ethics related to occupational therapy assistants.
07. Transport patients.
08. Demonstrate knowledge of first aid and CPR.
09. Discuss the etiology, progression, management, and prognosis of physical, emotional, and environmental stresses and trauma.
10. Discuss the effect of stress on optimal human functioning.
11. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations — SECONDARY NUMBER: ______

PROGRAM TITLE: Occupational Therapy Assistant — POSTSECONDARY NUMBER: 0317.080800

01.0 DEMONSTRATE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

01.01 Demonstrate awareness of self and relationship with others.
01.02 Conduct didactic and group discussions.
01.03 Record/report observations.
01.04 Instruct individuals and groups.

02.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY HEALTH-ILLNESS-HEALTH CONCEPTS -- The student will be able to:

02.01 Explain occupation as a health determinant.
02.02 Use health terminology appropriately.
02.03 Describe the basic function of the human body with particular emphasis on the neurological, musculoskeletal and cardiopulmonary systems.
02.04 Describe the basic development of personality and learning.
02.05 Describe appropriate life tasks as related to the developmental process from birth to death.
02.06 Identify the effects of environment and the community on the individual.
02.07 Identify and describe basic influences contributing to health.
02.08 Identify and describe disabling conditions commonly referred to occupational therapy.
02.09 Explain the role of occupational therapy as a profession.
02.10 Explain the relationship of occupational therapy to other health care workers.

03.0 ANALYZE AND APPLY LEARNED SKILLS IN SPECIFIC LIFE TASKS AND ACTIVITIES -- The student will be able to:

03.01 Demonstrate skill in performing selected life tasks and activities.
03.02 Demonstrate skill in instructing and adapting selected life tasks and activities.
03.03 Analyze activities.
03.04 Demonstrate proper care and maintenance of equipment and supplies.

04.0 APPLY OCCUPATIONAL THERAPY PRINCIPLES IN PATIENT/CLIENT RELATIONSHIP -- The student will be able to:

04.01 Contribute to initial screening of patients/clients.
04.02 Contribute to evaluation of occupational performance, performance components, and life space.
04.03 Plan occupational therapy programs to prevent deterioration of occupational performance.
04.04 Contribute to occupational therapy program planning for remediation of occupational performance deficits and performance component dysfunction.
04.05 Implement occupational therapy program to prevent deterioration of occupational performance.
04.06 Contribute to implementation of occupational therapy programs to restore and develop occupational performance.
04.07 Contribute to the implementation of occupational therapy programs to restore, develop, or prevent the deterioration of performance components.
04.08 Contribute to program administration and support.
04.09 Function in the role of supervisee and assist with supervision of

aides and volunteers.

05.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

05.01 Conduct a job search.
05.02 Secure information about a job.
05.03 Identify documents that may be required when applying for a job.
05.04 Complete a job application.
05.05 Demonstrate competence in job interview techniques.
05.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
05.07 Identify acceptable work habits.
05.08 Demonstrate knowledge of how to make job changes appropriately.
05.09 Demonstrate acceptable employee health habits.

06.0 DEMONSTRATE KNOWLEDGE OF ETHICS RELATED TO OCCUPATIONAL THERAPY ASSISTANTS -- The student will be able to:

06.01 Describe the relationship of the occupational therapy assistant to: a) the physician, b) the occupational therapist, c) the employer.
06.02 Explain the term "risk management".
06.03 Discuss the definition of ethics and explain the application of ethical principles in health care.
06.04 Explain to patient what you are going to do before you begin.
06.05 Explain the process of applying for a Florida license.
06.06 Identify documents which may be required when applying for a license.

07.0 TRANSPORT PATIENTS -- The student will be able to:

07.01 Transfer patient from bed to wheelchair.
07.02 Move wheelchair through corridors, elevators, cars, etc.
07.03 Provide information to patient as needed.

08.0 DEMONSTRATE KNOWLEDGE OF FIRST AID AND CPR -- The student will be able to:

08.01 Describe the legal ramifications of emergency care.
08.02 Recognize air obstruction and take proper actions.
08.03 Describe methods of immobilization a suspected fracture.
08.04 Perform CPR and keep American Red Cross or American Heart Association certification current.

09.0 DISCUSS THE ETIOLOGY, PROGRESSION, MANAGEMENT, AND PROGNOSIS OF PHYSICAL, EMOTIONAL, AND ENVIRONMENTAL STRESSES AND TRAUMA -- The student will be able to:

09.01 Discuss the "self fulfilling prophecy" concept as related to outcome after severe trauma, alteration of body image and self concept.
09.02 List the symptoms of stress in progressive order.
09.03 Define psychosomatic illness.
09.04 Define prognosis.

10.0 DISCUSS THE EFFECT OF STRESS ON OPTIMAL HUMAN FUNCTIONING -- The student will be able to:

10.01 Define stress in terms of physical assessment.
10.02 List three positive effects of stress.
10.03 Discuss stress as a motivator in improving human performance.

11.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

11.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.

11.02 Identify community resources and services available to the victims of immune-deficiency diseases.

11.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.

11.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

11.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Ophthalmic Assisting

CODE NUMBER: Secondary ______ Postsecondary H170703

Florida CIP 0317.070102

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: MED ASST @ 7 G TEC OPTICS @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as ophthalmic assistants or provide supplemental training for persons previously or presently employed in this occupation.

The program is designed to provide the medical community of ophthalmology with workers who, under the supervision of an ophthalmologist, aid in the treatment of eye conditions and diseases. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students (1) to perform specified ophthalmologic tests and procedures with skill, (2) understand and practice the art of ophthalmologic assisting, thereby providing the patient with medical careof the highest quality and accuracy, (3) to become members of the health care team that contribute to the physical and psychological comfort of the patient, (4) to provide a system of quality assurance for both equipment and treatment delivery, (5) and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of ophthalmology.

II. LABORATORY ACTIVITIES: Ophthalmologists' offices provide clinical experiences for students to practice state-of-the art ophthalmic assisting. Students must be under the direct supervision of a qualified Ophthalmologist. Clinical education has been established for students in this program. Designed to permit accurate assessment of the knowledge, skills, and abilities of students in the clinical component of the program. After completion of the prerequisite practice of ophthalmic assisting procedures, the student indicates to the faculty his/her readiness for evaluation of competence in a specific competency category/procedure.

Multiple affiliates are utilized for the clinical activities which provide equitable opportunities for the student to achieve the program clinical objectives. The resulting clinical rotations provide students with the technical skills for the ophthalmic medical assistant.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and task relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, and Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a State designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum contentby the appropriate Statewide Course Numbering system discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 1350 hours.

III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization. Student membership in the professional organization of the American Academy of Ophthalmologists.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate taking a general medical and ophthalmic history.
02. Demonstrate basic anatomical and functional ocular measurements.
03. Demonstrate the testing of ocular functions (e.g., visual acuity and basic color visions tests).
04. Demonstrate the performance of lensometry and basic skills related to optics.
05. Demonstrate the adjusting and making minor repairs on spectacles.
06. Demonstrate the administering of topical ophthalmic and oral medications.
07. Demonstrate the instructing of the patient in personal eye care.
08. Demonstrate the caring for and maintaining of ophthalmic instruments and equipment.
09. Demonstrate the caring for and maintaining and sterilizing of surgical instruments.
10. Demonstrate the performance of emergency procedures under the direction of the ophthalmologist.
11. Demonstrate employability skills.
12. Demonstrate knowledge of sexually transmitted diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Ophthalmic Assisting POSTSECONDARY NUMBER: H170703

01.0 DEMONSTRATE TAKING A GENERAL MEDICAL AND OPHTHALMIC HISTORY -- The student will be able to:

01.01 Use medical terminology to accurately describe body structures and functions.
01.02 Maintain patient confidentiality.
01.03 Maintain ethical and legal standards.
01.04 Perform duties within the scope of training and education.
01.05 Describe the basic body structures.
01.06 Describe the functioning process of each body system.
01.07 Communicate effectively in oral and written communications.

02.0 DEMONSTRATE BASIC ANATOMICAL AND FUNCTIONAL OCULAR MEASUREMENTS -- The student will be able to:

02.01 Identify the structures of the eye.
02.02 Apply basic medical terminology to ocular structures.

03.0 DEMONSTRATE THE TESTING OF OCULAR FUNCTIONS (e.g., VISUAL ACUITY AND BASIC COLOR VISIONS TESTS) -- The student will be able to:

03.01 Describe the basic functioning process of the eye.
03.02 Describe the basics of indentation and application tonometry and sources of error.
03.03 Describe the appropriate methods for cleaning and sterilization of tonometers.
03.04 Describe the principle of ocular rigidity.
03.05 Describe the pitfalls of tonometry.
03.06 Accurately perform a basic color vision test.
03.07 Identify the abnormal versus normal test results.
03.08 Read the prism of a lens.
03.09 Utilize basic color vision charts.

04.0 DEMONSTRATE THE PERFORMANCE OF LENSOMETRY AND BASIC SKILLS RELATED TO OPTICS -- The student will be able to:

04.01 Measure and record distance and near vision.
04.02 Describe basic interactions of light and lenses.
04.03 Measure interpupillary distance for far and near.
04.04 Describe basic optical properties of the human eye.
04.05 Appropriately remove contact lenses and prosthetics from the patient's eye(s).

05.0 DEMONSTRATE THE ADJUSTING AND MAKING MINOR REPAIRS ON SPECTACLES -- The student will be able to:

05.01 Describe the principles of ophthalmic patient services.
05.02 Make simple and minor repairs to spectacles such as adjusting the temple and nose piece.
05.03 Adjust the spectacles to patient comfort.

06.0 DEMONSTRATE THE ADMINISTERING OF TOPICAL OPHTHALMIC AND ORAL MEDICATIONS -- The student will be able to:

06.01 List the advantages and disadvantages of drops, ointments, sustained release systems, and systematic use of medications.
06.02 Describe the methods for installation of topical eye drugs.
06.03 Administer and record specified topical and oral medications under the direction of a physician.
06.04 Identify possible ocular emergencies and take appropriate action

at the direction of the physician.

07.0 DEMONSTRATE THE INSTRUCTING OF THE PATIENT IN PERSONAL EYE CARE -- The student will be able to:

07.01 Describe characteristics of common external and internal diseases of the eye.
07.02 Communicate effectively with the patient.
07.03 Describe the personal eye care plans commensurate with the level of training.

08.0 DEMONSTRATE THE CARING FOR AND MAINTAINING OF OPHTHALMIC INSTRUMENTS AND EQUIPMENT -- The student will be able to:

08.01 Identify various ophthalmic instruments and equipment.
08.02 Change bulbs and batteries for ophthalmic equipment.
08.03 Clean and sterilize surgical instruments.
08.04 Perform basic maintenance and basic calibrations for ophthalmic clinical equipment.
08.05 Clean perimeter bowls.
08.06 Apply safety/security procedures.
08.07 Store ophthalmic instruments safely.
08.08 Cover ophthalmic equipment appropriately.
08.09 Provide attractive, clean, orderly and comfortable work environment.

09.0 DEMONSTRATE THE CARING FOR, MAINTAINING AND STERILIZING OF SURGICAL INSTRUMENTS -- The student will be able to:

09.01 Describe the fundamentals of microbial control.
09.02 Describe procedures for sterilization, disinfection and sanitation.
09.03 Describe methods for control of infection and prevention of contamination in the medical facility.
09.04 Describe the appropriate procedure for the handling of contaminated equipment and supplies.
09.05 Describe the appropriate method for disposal of contaminated materials.
09.06 Describe and accurately perform handwashing techniques.

10.0 DEMONSTRATE THE PERFORMANCE OF EMERGENCY PROCEDURES UNDER THE DIRECTION OF THE OPHTHALMOLOGIST -- The student will be able to:

10.01 Maintain emergency equipment and supplies.
10.02 Operate emergency equipment.
10.03 Maintain control of emergency situations.
10.04 Provide patient reassurance and comfort.
10.05 Describe what constitutes emergency situations.
10.06 Administer cardiopulmonary resuscitation when the emergency arises.
10.07 Implement emergency procedures and administer first aid in cases of fainting and acute drug reactions.
10.08 Identify medical emergencies and take appropriate action at the direction of the physician.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.

12.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS -- The student will be able to:

12.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
12.02 Identify community resources and services available to the victims of sexually transmitted diseases.
12.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
12.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Ophthalmic Dispensing

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.070100

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____ Postsecondary Adult Vocational

X Postsecondary Vocational ____ Other ____________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dispensing opticians (299.474-010), optician apprentices, dispensing (713.361-010), dispensing opticians 1, or opticians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, lens surfacing, finishing and mounting; dispensing of completed prescriptions; fitting contact lenses; frame repair, business management techniques and human relations.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Clinical and/or commercial laboratory experiences are integrated with the didactic portion of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Graduates of a recognized program with an A.S. Degree are eligible to take the Florida optician licensure examination administered by the Department of Professional Regulation for the Board of Opticianry.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Surface ophthalmic lenses.
02. Edge and finish lenses.
03. Insert and mount lenses.
04. Select and order frames and lenses.
05. Fit and dispense prescriptions.
06. Fit contact lenses.
07. Repair frames.
08. Demonstrate knowledge of communication skills, legal and ethical principles, interpersonal relationships, and office management.
09. Practice effective business management techniques.
10. Demonstrate knowledge of anatomy and physiology of the eye.
11. Demonstrate knowledge of the effects ophthalmic devices have in correcting the errors of human vision.
12. Practice technical and business computer functions.
13. Demonstrate employability skills.
14. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS   EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations   SECONDARY NUMBER: ______

PROGRAM TITLE: Ophthalmic Dispensing   POSTSECONDARY NUMBER: 0317.070100

01.0 SURFACE OPHTHALMIC LENSES -- The student will be able to:

01.01 Layout single vision and multi-focal lenses.
01.02 Grind, fine and polish single vision lenses and/or multi-focal lenses.
01.03 Select lenses and supplies.
01.04 Inspect lenses.

02.0 EDGE AND FINISH LENSES -- The student will be able to:

02.01 Layout and block lenses.
02.02 Machine and hand edge lenses.
02.03 Inspect lenses.
02.04 Air temper glass lenses.
02.05 Chemical temper glass lenses.
02.06 Tint hard resin lenses.
02.07 Select appropriate lenses.

03.0 INSERT AND MOUNT LENSES -- The student will be able to:

03.01 Insert lenses into zyl frames.
03.02 Insert lenses into metal frames.
03.03 Mount lenses into rimless and semi-rimless mountings or other appropriate designs.
03.04 Perform final inspection of eye glasses.
03.05 Demonstrate knowledge of lens accessories.

04.0 SELECT AND ORDER FRAMES AND LENSES -- The student will be able to:

04.01 Analyze written prescriptions.
04.02 Duplicate prescriptions from existing lenses.
04.03 Evaluate patient's life-style needs.
04.04 Use selected instruments to assist in the calculation of fitting measurements.
04.05 Calculate lens size and availability.
04.06 Discuss charges with patients.
04.07 Order lenses and frames.

05.0 FIT AND DISPENSE PRESCRIPTIONS -- The students will be able to:

05.01 Verify finished prescriptions to specifications.
05.02 Align frames.
05.03 Adjust and fit optical devices to patients.

06.0 FIT CONTACT LENSES -- The student will be able to:

06.01 Analyze prescriptions.
06.02 Evaluate patient suitability.
06.03 Use selected instruments to conduct and assess fittings.
06.04 Identify types of contact lenses.
06.05 Conduct patient training.
06.06 Outline potential complications.
06.07 Conduct follow-up evaluations.

07.0 REPAIR FRAMES -- The student will be able to:

07.01 Restore finish and replace/repair decorative trim on frames.
07.02 Replace/repair nose pieces on zyl or metal frames.
07.03 Solder metal frames.
07.04 Replace/repair temples, front pieces, monofilament, and broken

hinges.
07.05 Reshape damaged frames to lenses.
07.06 Replace/repair temples.
07.07 Modify frames for special needs.

08.0 DEMONSTRATE KNOWLEDGE OF COMMUNICATION SKILLS, LEGAL AND ETHICAL PRINCIPLES, INTERPERSONAL RELATIONSHIPS, AND OFFICE MANAGEMENT -- The student will be able to:

08.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.

08.02 Demonstrate the use of several means of communication.
08.03 Maintain and file patient records.
08.04 Bill and collect current and overdue accounts.
08.05 Practice office supply control.

09.0 PRACTICE EFFECTIVELY BUSINESS MANAGEMENT TECHNIQUES -- The student will be able to:

09.01 Develop a small business plan of operation.
09.02 Develop an office policy/procedure manual.
09.03 Demonstrate knowledge of business finance and operating expenses.
09.04 Set up a pay scale and benefit program for employees and a bookkeeping system.
09.05 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
09.06 Demonstrate knowledge of employee hiring and orientation.

10.0 DEMONSTRATE KNOWLEDGE OF ANATOMY AND PHYSIOLOGY OF THE EYE -- The student will be able to:

10.01 Demonstrate understanding of the interrelationships between body systems.
10.02 Diagram and explain the anatomy of the visual system.
10.03 Recognize and discuss physiological conditions of the eye.

11.0 DEMONSTRATE KNOWLEDGE OF THE EFFECTS OPHTHALMIC DEVICES HAVE IN CORRECTING THE ERRORS OF HUMAN VISION -- The student will be able to:

11.01 Demonstrate knowledge of basic mathematical principles that are involved in opthalmic and geometrical optics.
11.02 Describe the influence of thick and thin prisms on the behavior of light.
11.03 Apply the principles of light acting on curved single refracting surface to the optics of ophthalmic lenses for parallel and nonparallel light.
11.04 Describe the relationship and optical properties of cylindrical lenses.
11.05 Demonstrate knowledge of the theory of lens surface power measuring devices.
11.06 Create and eliminate prismatic effect by decentration.
11.07 Demonstrate the influence of lens thickness and surface curvature.

12.0 PRACTICE TECHNICAL AND BUSINESS COMPUTER FUNCTIONS -- The student will be able to:

12.01 Demonstrate knowledge of technical computer functions.
12.02 Demonstrate knowledge of business applications of computers.

13.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

13.01 Conduct a job search.
13.02 Secure information about a job.
13.03 Identify documents that may be required when applying for a job.
13.04 Complete a job application.

13.05 Demonstrate competence in job interview techniques.
13.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
13.07 Identify acceptable work habits.
13.08 Demonstrate knowledge of how to make job changes appropriately.
13.09 Demonstrate acceptable employee health habits.

14.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS -- The student will be able to:

14.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
14.02 Identify community resources and services available to the victims of sexually transmitted diseases.
14.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
14.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
14.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Ophthalmic Technician

CODE NUMBER: Secondary _______ Postsecondary _______

Florida CIP 0317.070101

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ________

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other ______________________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as ophthalmic technicians, or provide supplemental training for persons previously or presently employed in this occupation.

The program is designed to provide the medical community of ophthalmology with workers who, under the supervision of an ophthalmologist, aids in the treatment of eye conditions and diseases. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students (1) to perform specified ophthalmologic tests and procedures with skill, (2) understand and practice the art of ophthalmologic assisting, thereby providing the patient with medical care of the highest quality and accuracy, (3) to become members of the health care team who contribute to the physical and psychological comfort of the patient, (4) to provide a system of quality assurance for both equipment and treatment delivery, (5) and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of ophthalmology.

II. LABORATORY ACTIVITIES: Ophthalmologists' offices provide clinical experiences for students to practice state-of-the-art ophthalmic assisting. Students must be under the direct supervision of a qualified Ophthalmologist.

Clinical education has been established for students in this program to permit accurate assessment of the knowledge, skills, and abilities of students in the clinical component of the program. After completion of the prerequisite practice of ophthalmic assisting procedures, the student indicates to the faculty his/her readiness for evaluation of competence in a specific competency category/procedure.

Multiple affiliates are utilized for the clinical activities which provide equitable opportunities for the student to achieve the program clinical objectives. The resulting clinical rotations provide students with the technical skills for the ophthalmic medical technician.

III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization: student should also consider membership in the professional organization of the American Academy of Ophthalmologists.

In accordance with Section 233.0695 F.S., minimum basic skills grade level required for this postsecondary adult vocational program is:

Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a State designated basic skills examination.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate the taking a medical history.
02. Demonstrate the performance of diagnostic tests.
03. Demonstrate anatomical and functional ocular measurements.
04. Demonstrate testing of ocular functions (including visual acuity and visual fields).
05. Demonstrate the administration of topical ophthalmic and oral medications.
06. Demonstrate the instruction of the patient in personal eye care and in the use of contact lenses.
07. Demonstrate the caring for and maintaining of ophthalmic instruments.
08. Demonstrate the caring for, maintaining and sterilizing of surgical instruments.
09. Demonstrate the maintaining of ophthalmic office equipment.
10. Demonstrate assisting in ophthalmic surgery in the office or hospital.
11. Demonstrate the taking of optical measurements including A-scan.
12. Demonstrate assisting in the fitting of contact lenses.
13. Demonstrate the adjusting and making of minor repairs on spectacles.
14. Such other tasks as may be delegated consistent with sound medical practice (e.g. use of computerized ophthalmic equipment).
15. Demonstrate employability skills.
16. Demonstrate knowledge of sexually transmitted diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations **SECONDARY NUMBER:** ______

PROGRAM TITLE: Ophthalmic Technician **POSTSECONDARY NUMBER:** 0317.070301

01.0 DEMONSTRATE THE TAKING A MEDICAL HISTORY -- The student will be able to:

01.01 Communicate effectively in written and oral communications.
01.02 Use appropriate medical terminology in recording the medical history.
01.03 Maintain patient confidentiality.
01.04 Maintain applicable ethical and legal standards.
01.05 Identify body structures and describe the physiological processes of the body's systems.

02.0 DEMONSTRATE THE PERFORMANCE OF DIAGNOSTIC TESTS -- The student will be able to:

02.01 Perform competently within the scope of training and education.
02.02 Accept responsibility for professional actions.

03.0 DEMONSTRATE ANATOMICAL AND FUNCTIONAL OCULAR MEASUREMENTS -- The student will be able to:

03.01 Describe the functions of each body system.
03.02 Describe the principles of human physiology.
03.03 Identify and describe tissues and cellular structures of the eye.
03.04 Apply the correct medical terminology to body structures and functions.
03.05 Identify cause and effect of the most common pathological conditions of each body system.

04.0 DEMONSTRATE TESTING OF OCULAR FUNCTIONS (INCLUDING VISUAL ACUITY AND VISUAL FIELDS) -- The student will be able to:

04.01 Describe the interaction of light, lenses, laws of optics.
04.02 Describe optical properties of the human eye.
04.03 Measure objectively and subjectively the refractive state of the eye.

05.0 DEMONSTRATE THE ADMINISTRATION OF TOPICAL OPHTHALMIC AND ORAL MEDICATIONS -- The student will be able to:

05.01 Identify commonly administered drugs, their uses and effects upon the human body.
05.02 Identify the correct abbreviations and terminology relating to pharmaceutical preparations.
05.03 Identify the various routes of drug administration.
05.04 Describe the legal records necessary for the administration and dispensing of drugs by the physician.
05.05 Describe the ethical standards necessary for the administration and dispensing of drugs by the physician.
05.06 Administer and record specified topical and oral medications at the direction of the physician and in accordance with medical standards.
05.07 Identify security procedures of medications as regulated by law.
05.08 Describe appropriate procedures for the disposition of medications and clinical supplies in reference of shelf-life expectancies and/or expiration dates.

06.0 DEMONSTRATE THE INSTRUCTION OF THE PATIENT IN PERSONAL EYE CARE AND IN THE USE OF CONTACT LENSES -- The student will be able to:

06.01 Instruct the patient in the correct methods of insertion and

removal of the contact lenses.
06.02 Instruct the patient in the appropriate methods of daily care of the eye and the contact lenses.

07.0 DEMONSTRATE THE CARING FOR AND MAINTAINING OF OPHTHALMIC INSTRUMENTS -- The student will be able to:

07.01 Describe the fundamental principles of the maintenance, inventory control, and ordering of ophthalmic instruments.
07.02 Maintain a clinic inventory of the instruments.
07.03 Describe the appropriate safety/security procedures for the instruments.

08.0 DEMONSTRATE THE CARING FOR, MAINTAINING AND STERILIZING OF SURGICAL INSTRUMENTS -- The student will be able to:

08.01 Describe the fundamentals of microbial control.
08.02 Describe procedures for sterilization, disinfection and sanitation.
08.03 Describe methods for control of infection and prevention of contamination in the medical facility.
08.04 Describe the appropriate procedure for the handling of contaminated equipment and supplies.
08.05 Describe the appropriate method for disposal of contaminated materials.
08.06 Describe and accurately perform handwashing techniques.

09.0 DEMONSTRATE THE MAINTAINING OF OPHTHALMIC OFFICE EQUIPMENT -- The student will be able to:

09.01 Describe the fundamental principles of the maintenance, inventory control, and ordering of ophthalmic supplies and equipment.
09.02 Maintain and inventory of office equipment.
09.03 Apply appropriate safety/security procedures for equipment.
09.04 Perform quality assurance procedures on all clinical equipment.
09.05 Describe and perform appropriate maintenance programs for various ophthalmic equipment.

10.0 DEMONSTRATE ASSISTING IN OPHTHALMIC SURGERY IN THE OFFICE OR HOSPITAL -- The student will be able to:

10.01 Describe the fundamentals of microbial control.
10.02 Describe the procedures for sanitation, disinfection, and sterilization.
10.03 Describe methods for infection control and prevention of contamination in the medical facility.
10.04 Describe procedures for safe handling of contaminated equipment and supplies.
10.05 Describe the appropriate method and demonstrate appropriate handwashing techniques.
10.06 Describe the appropriate method for creating and maintaining sterile fields for dressings and minor surgery.
10.07 Describe the correct methods for disposal of contaminated materials.
10.08 Describe the appropriate methods for sterilizing and preparing surgical instruments.
10.09 Maintain and use aseptic technique when applicable.
10.10 Prepare the examination and treatment in accordance with the appropriate sterile or aseptic technique.
10.11 Describe the appropriate methods of assisting the physician with various minor office surgical procedures.

11.0 DEMONSTRATE THE TAKING OF OPTICAL MEASUREMENTS INCLUDING A-SCAN -- The student will be able to:

11.01 Describe the fundamentals of extraocular muscle balance and binocular vision.

11.02 Test ductions and versions.
11.03 Perform cover tests.
11.04 Perform basic tests to evaluate binocular vision.

12.0 DEMONSTRATE ASSISTING IN THE FITTING OF CONTACT LENSES -- The student will be able to:

12.01 Describe the principles and utilization of hard, soft and gas permeable lenses.
12.02 Assist in the fitting and evaluation of contact lenses.
12.03 Provide patient education relative to wearing and maintaining contact lenses.

13.0 DEMONSTRATE THE ADJUSTING AND MAKING OF MINOR REPAIRS ON SPECTACLES -- The student will be able to:

13.01 Describe the principles of ophthalmic patient services.
13.02 Make simple and minor repairs to spectacles such temple adjustments and adjustment of the nose piece.
13.03 Adjust the spectacles to patient comfort.

14.0 SUCH OTHER TASKS AS MAY BE DELEGATED CONSISTENT WITH SOUND MEDICAL PRACTICE (E.G. USE OF COMPUTERIZED OPHTHALMIC EQUIPMENT) -- The student will be able to:

14.01 Describe the appropriate application of various tests and procedures.
14.02 Recognize any deviation from the normal test results.
14.03 Describe procedures for collecting, labeling, preserving, staining and culturing of specimens from patients with ocular problems.
14.04 Give appropriate instructions to patients.

15.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

15.01 Conduct a job search.
15.02 Secure information about a job.
15.03 Identify documents that may be required when applying for a job.
15.04 Complete a job application.
15.05 Demonstrate competence in job interview techniques.
15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
15.07 Identify acceptable work habits.
15.08 Demonstrate knowledge of how to make job changes appropriately.
15.09 Demonstrate acceptable employee health habits.

16.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS -- The student will be able to:

16.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
16.02 Identify community resources and services available to the victims of sexually transmitted diseases.
16.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
16.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Optometric Assisting

CODE NUMBER: Secondary ______ Postsecondary H170704

Florida CIP 0317.070501

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____7-9 _____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: TEC OPTICS @ 7 G OPTOM ASST @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as optometric assistant (89917739), (079.364-014) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, basic instruction in anatomy and physiology, CPR, Heartsaver, office practices and dispensing of visual devices. Because optometrists now deal with certain drugs, students need knowledge of diagnostic and therapeutic drugs under supervision.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Students are prepared to assist in performing tests to determine defects in vision, preparing and fitting eyeglasses and contact lenses, and administering corrective eye exercises and other treatments under the supervision of a person licensed under FL Statutes 458, 459, 463 or 4841.

II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization as well as participation in a career related professional organization(s) for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Students should be strongly encouraged to take the Registry examination offered by the Paraoptometric Section of the American Optometric Association.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is:

Mathematics 9.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 30.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 1350 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of business management techniques.
02. Performs delivery of optical devices.
03. Perform and assist in procedures used in visual testing.
04. Perform special procedures.
05. Demonstrate knowledge of the refractive status of the eye and binocularity.
06. Demonstrate knowledge of basic ocular anatomy and physiology.
07. Demonstrate employability skills.
08. Demonstrate knowledge of immune-deficiency diseases, including AIDS.
09. Use verbal and written communication.
10. Apply basic math skills.
11. Apply basic science skills.

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations — SECONDARY NUMBER: ______

PROGRAM TITLE: Optometric Assisting — POSTSECONDARY NUMBER: H170704

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

01.01 Identify and use various forms of communication.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.05 Maintain current documentation.
01.06 Demonstrate proper telephone usage.
01.07 Demonstrate basic computer skills.
01.08 Properly identify patients.
01.09 Obtain specified data from patient and family.
01.10 Receive and give oral report of patient's status.
01.11 Report and record objective, pertinent observations.
01.12 Utilize verbal and written information to assist with the plan of care for the patient..

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Read, interpret and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity, and mass/weight.
02.03 Make estimates and approximations and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Demonstrate ability to evaluate and draw conclusions.
03.04 Demonstrate knowledge of anatomy and physiology of body systems.

04.0 DEMONSTRATE KNOWLEDGE OF BUSINESS MANAGEMENT TECHNIQUES -- The student will be able to:

04.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
04.02 Demonstrate the use of several means of communication.
04.03 Maintain and file patient records.
04.04 Bill and collect current and overdue accounts.
04.05 Practice office supply control.
04.06 Demonstrate knowledge of medical terminology.
04.07 Practice accepted work ethic.
04.08 Maintain basic equipment.
04.09 Schedule patients.
04.10 Complete and file third party forms.
04.11 Type 25 words per minute correctly.

05.0 PERFORM DELIVERY OF OPTICAL DEVICES -- The student will be able to:

05.01 Transcribe and interpret prescriptions.
05.02 Neutralize and verify lenses.
05.03 Edge and insert lenses.
05.04 Select and order lenses.
05.05 Adjust, dispense and repair spectacles.
05.06 Assist patients with frame and lens selection.
05.07 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.
05.08 List the types of repairs which can be performed on plastic and metal frames and describe how these repairs are accomplished.

06.0 PERFORM AND ASSIST IN PROCEDURES USED IN VISUAL TESTING -- The student will be able to:

06.01 Perform vision screening and preliminary testing.
06.02 Measure and record visual acuity.
06.03 Measure and record color vision.
06.04 Measure and record stereo acuity.
06.05 Take and record patient histories.
06.06 Perform chairside assisting.
06.07 Describe components of and instrumentation used in comprehensive vision evaluation.

07.0 PERFORM SPECIAL PROCEDURES -- The student will be able to:

07.01 Assist in fitting contact lenses.
07.02 Instruct patients in care and handling of contact lenses.
07.03 Use selected instruments to verify contact lenses.
07.04 Demonstrate knowledge of the advantages and disadvantages of various contact lens materials and designs.
07.05 Instruct patients in visual therapy.
07.06 Measure and record intraocular pressure.
07.07 Measure and record a visual field.
07.08 Take and record blood pressure.
07.09 Perform First Aid and CPR.
07.10 Demonstrate knowledge of diagnostic and therapeutic drugs.

08.0 DEMONSTRATE KNOWLEDGE OF THE REFRACTIVE STATUS OF THE EYE AND BINOCULARITY -- The student will be able to:

08.01 Demonstrate knowledge of refractive errors.
08.02 Demonstrate knowledge of visual deficiencies.
08.03 Demonstrate knowledge of ocular motility.
08.04 Demonstrate knowledge of binocular vision.
08.05 Demonstrate ability to communicate knowledge to patients.
08.06 Demonstrate the ability to recognize sight threatening emergencies.

09.0 DEMONSTRATE KNOWLEDGE OF BASIC OCULAR ANATOMY AND PHYSIOLOGY -- The student will be able to:

09.01 Demonstrate knowledge of ocular anatomy.
09.02 Demonstrate knowledge of ocular physiology.
09.03 Demonstrate knowledge of pathological and functional disorders of the eye.
09.04 Correlate general health as it relates to ocular health.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

10.01 Conduct a job search.
10.02 Secure information about a job.
10.03 Identify documents that may be required when applying for a job.
10.04 Complete a job application form correctly.
10.05 Demonstrate competence in job interview techniques.
10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
10.07 Identify acceptable work habits.
10.08 Demonstrate knowledge of how to make job changes appropriately.
10.09 Demonstrate acceptable emoloyee health habits.

11.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

11.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
11.02 Identify community resources and services available to the victims of immune-deficiency diseases.
11.03 Identify at risk behaviors which promote the spread of AIDS and

the public education necessary to combat the spread of immune-deficiency diseases.

11.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

11.05 Demonstrate knowledge of legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Paramedic

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.020600

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ____7-9 ____9-12 ____Postsecondary Adult Vocational

X Postsecondary Vocational Certificate ____ Other ______

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: This program is designed to prepare students as paramedics. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services; and the curriculum must adhere to the U.S. Department of Transportation (DOT) Emergency Medical Technician-Paramedic National Standard Curriculum.

The content includes, but is not limited to, the six divisions of the DOT Curriculum: prehospital environment, preparatory, trauma, medical, OB/GYN/neonatal, and behaviors. The Paramedic provides emergency care to acutely ill or injured patients in primarily pre-hospital settings which are under physician direction. Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice. This program prepares students for certification as a Paramedic in accordance with standards given in Chapter 10D-66 of the Florida Administrative Code.

II. LABORATORY ACTIVITIES: Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor.

III. SPECIAL NOTE: An appropriate student organization for providing the development of professionalism and leadership skills should be provided. These organizations may include HOSA, Health Occupations Students of America, Inc., or an organization of the schools choice. This suggestion was made in light of the nature of EMT and Paramedic students which includes the adult learner already involved in unions or EMS professional groups as well as the newly graduated high school senior.

Emergency Medical Technician (EMT) program completion/certification is required for admittance into the program.

The procedures performed by a Paramedic shall be performed under the direction of a licensed physician with appropriate emergency experience.

The typical length of this program for the average achieving student is 1000 hours with a community college certificate.

The Student Performance Standards for Emergency Medical Technology-Paramedic were adapted and condensed from the U.S. Department of Transportation (DOT) Emergency Medical Technician-Paramedic National Standard Curriculum Instructor's Lesson

Plans, which are incorporated by cross-reference. Administrators and instructors should refer to the DOT materials for additional details.

NOTE: When the word demonstrate is used in a standard, it shall require that actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of the paramedic profession.
02. Describe EMS systems.
03. Describe medical/legal considerations.
04. Describe and demonstrate EMS communications systems.
05. Demonstrate rescue techniques and extrication.
06. Describe major incident response.
07. Describe and manage causes of stress.
08. Use medical terms.
09. Demonstrate general patient assessment and initial management.
10. Manage airway and ventilation.
11. Assess and manage shock.
12. Demonstrate knowledge of pharmacology and administer medications.
13. Assess and manage trauma emergencies.
14. Assess and manage burn injuries.
15. Assess and manage respiratory emergencies.
16. Assess and manage cardiovascular emergencies.
17. Assess and manage endocrine emergencies.
18. Assess and manage neurological emergencies.
19. Assess and manage digestive, genitourinary, and reproductive emergencies.
20. Assess and manage anaphylaxis emergencies.
21. Assess and manage toxicological, alcohol, and drug abuse emergencies.
22. Assess and manage infectious diseases.
23. Assess and manage environmental injuries.
24. Assess and manage geriatric emergencies.
25. Assess and manage pediatric emergencies.
26. Assess and manage the gynecologic patient.
27. Assess and manage the obstetric patient.
28. Assess and manage the neonate.
29. Assess and manage behavioral emergencies.
30. Demonstrate employability skills.
31. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER:

PROGRAM TITLE: Paramedic POSTSECONDARY NUMBER: 0317.020600

01.0 DEMONSTRATE KNOWLEDGE OF THE PARAMEDIC PROFESSION -- The student will be able to:

01.01 Define the role and responsibilities of the paramedic.
01.02 Describe and contrast the differences between the various levels of training, from EMT to Paramedic.
01.03 Describe ethics, professionalism, and health care professional.
01.04 Identify whether a particular activity is ethical/unethical, legal/illegal and professional/unprofessional in specific patient care situations.
01.05 List current state requirements for paramedic certification and recertification.
01.06 Define continuing education, certification, licensure and registration.
01.07 Discuss Chapter 401, Florida Statutes, and Chapter 10D-66, Florida Administrative Code.
01.08 State the major purposes of a national association, a national registry, and professional journals.
01.09 State the benefits of paramedics teaching in their community.

02.0 DESCRIBE EMS SYSTEMS -- The student will be able to:

02.01 Define and describe Medical Control and physician responsibility.
02.02 Discuss pre-hospital stabilization of patients.
02.03 Discuss the general differences between management of trauma and medical patients.
02.04 Define and discuss protocols and their development.
02.05 Describe the relationship between prehospital care and total patient care including the emergency department, and hospital specialty departments.
02.06 Describe the continuum of patient care and the responsibilities of the paramedic within the transfer of patient responsibility.
02.07 Discuss the development, implementation, and control of an EMS system.
02.08 Discuss response of the EMS system including system access, dispatcher responsibilities, patient evaluation, medical command, and patient responsibility.
02.09 Discuss promulgation of national standards such as KKK ambulance standards, and involvement of groups such as ASTM, NCSEMSTC, American College of Surgeons, American Medical Association Joint Review Committee, and the U.S. Dpeartment of Transportation.
02.10 Discuss the various paramedic-physician relationships.
02.11 Describe retrospective evaluation of patient care including run report review, continuing education, skill practice, and skill deterioration.
02.12 Discuss the EMT-P's initial responsibilities when arriving on the scene.

03.0 DESCRIBE MEDICAL/LEGAL CONSIDERATIONS -- The student will be able to:

03.01 Discuss the scope and significance of current national and Florida laws and administrative rules relating to the paramedic.
03.02 Discuss medical-legal concepts relating to the paramedic.
03.03 Discuss the need for accurate medical documentation and recordkeeping.
03.04 Discuss the extent to which force and restraint may be used to protect the patient, the Paramedic, and third parties.
03.05 Identify those circumstances that require the Paramedic to report incidents to law enforcement and/or other appropriate authorities.

04.0 DESCRIBE AND DEMONSTRATE EMS COMMUNICATIONS SYSTEMS
-- The student will be able to:

04.01 Describe the phases of communication necessary to complete a typical EMS event.
04.02 Define and describe essential communication terms and equipment.
04.03 Describe various EMS communication systems and the advantages and disadvantages of each.
04.04 Describe factors affecting interference, range and clarity of base, vehicle and portable radio communications.
04.05 Describe the functions and responsibilities of the F.C.C.
04.06 Describe the functions and responsibilities of the EMS dispatcher.
04.07 Describe purposes and methods of verbal communication of patient information to the hospital and to the physician.
04.08 Organize a patient presentation in the proper order for radio transmission to the physician.
04.09 Describe the importance of written medical protocols and the written EMS run report.
04.10 Demonstrate the proper use of portable and mobile transmitter/receivers in a real or simulated patient situation.
04.11 Discuss uses of biotelemetry equipment.
04.12 Complete a written EMS report based on a real or simulated patient situation.

05.0 DEMONSTRATE RESCUE TECHNIQUES AND EXTRICATION
-- The student will be able to:

05.01 Identify possible hazards when given a description of a scene and describe the procedures for handling the hazards.
05.02 Identify and/or describe the equipment used and the techniques necessary for gaining access to, packaging, extricating and transporting patients trapped within a vehicle or other confinement.
05.03 Describe the integration of patient care into the process of patient disentanglement and rescue.
05.04 Identify proper response in the presence of hazardous materials and name proper hazardous materials authorities that should be notified.
05.05 Manage scene and safe patient access.
05.06 Discuss removal and transport of the patient from the scene.
05.07 Demonstrate the procedures and operation of equipment used for gaining access to, packaging, extricating, and transporting patients trapped or confined in a vehicle or other type of entrapment.
05.08 Demonstrate techniques for lifting and handling patients with and without spine injuries and/or other special injury problems utilizing the specialized equipment found on a rescue vehicle.
05.09 Demonstrate techniques for lifting and moving patients utilizing typical patient handling/carrying devices.

06.0 DESCRIBE MAJOR INCIDENT RESPONSE -- The student will be able to:

06.01 Define mass casualty incident (MCI) and when it should be declared.
06.02 Describe the "pre-planning phase" and "response planning".
06.03 Discuss MCI communications.
06.04 Describe the components of special resources.
06.05 Describe the function of "scene command", "scene triage", and the "transferring command function".
06.06 Describe section and staging management and a system for patient identification.
06.07 Discuss on-scene medical control.

07.0 DESCRIBE AND MANAGE CAUSES OF STRESS -- The student will be able to:

07.01 Define stress and discuss its causes and phases.

07.02 Describe common physiologic responses to stress, its effects, and typical defense mechanisms.
07.03 Describe factors that determine whether anxiety is a positive or negative response.
07.04 Describe behavior that is a manifestation of stress in patients, patients' families and the paramedic.
07.05 Identify and describe common causes of job-related stress and various techniques of paramedic stress management.
07.06 Describe the stages of the grief process and common needs of the patient, the family and the paramedic in dealing with death and dying.
07.07 Describe common management techniques used by the paramedic when a patient is dead or dying.
07.08 Discuss areas of controversy in prehospital care involving death and dying.

08.0 USE MEDICAL TERMS -- The student will be able to:

08.01 Define and use relevant medical terms.
08.02 Identify and use common anatomical medical terms.
08.03 Identify and use medical abbreviations.
08.04 Identify and define common prefixes, suffixes, and word roots.
08.05 Use a medical dictionary.

09.0 DEMONSTRATE GENERAL PATIENT ASSESSMENT AND INITIAL MANAGEMENT -- The student will be able to:

09.01 Establish priorities of care based on threat to life and describe the treatment modalities for the management of these conditions.
09.02 Describe the primary and secondary survey.
09.03 Describe the anatomy, physiology and pathophysiology of the airway and lungs and its anatomical structures.
09.04 Describe the use of adjuncts in airway management.
09.05 Describe advanced methods of airway management.
09.06 Explain the significance of protection of the cervical spine in airway management.
09.07 Explain pulmonary ventilation and gas exchange across the alveolarcapillary membrane.
09.08 Describe the pathophysiology of open and closed pulmonary injuries.
09.09 Discuss the techniques for evaluating effectiveness of ventilation.
09.10 Describe the anatomy and physiology of the heart and the cardiovascular system.
09.11 Describe the pathophysiology of cardiac arrest.
09.12 Describe the mechanisms of evaluating the effectivensss of perfusion.
09.13 Describe hemorrhage control and its benefits and complications.
09.14 Assess neurological status.
09.15 Discuss the pathophysiology of shock.
09.16 Define the trauma score and its usefulness.
09.17 Demonstrate obtaining a relevant patient medical history.
09.18 Describe how a patient is packaged and stabilized for transportation to the hospital.
09.19 Discuss procedures for hospital selection, the transportation phase, and patient monitoring enroute to the hospital.
09.20 Perform a rapid assessment.
09.21 Perform a secondary survey.
09.22 Demonstrate cardiopulmonary resuscitation.

10.0 MANAGE AIRWAY AND VENTILATION -- The student will be able to:

10.01 Describe and discuss techniques of advanced airway management, to include intubation and surgical procedures.
10.02 Demonstrate methods of airway management on adult, child, and intact manikins both manually and with adjunctive equipment.
10.03 Demonstrate methods for assessing continued adequacy of airway

management and ventilation when using advanced airway devices.
10.04 Demonstrate use of portable and fixed suction devices for oropharyngeal and tracheal suctioning.

11.0 ASSESS AND MANAGE SHOCK -- The student will be able to:

11.01 Identify and describe the causes, pathophysiology signs, symptoms, clinical manifestations, and management of shock.
11.02 Describe fluids, fluid transport, and fluid and electrolyte imbalances.
11.03 Discuss resuscitation of the shock patient.
11.04 Discuss the hemodynamics of the cardiovascular system.
11.05 Discuss differences in IV fluid composition and their implications in fluid administration.
11.06 Describe baroreceptors and their affect on blood pressure and perfusion.
11.07 Describe compensated and uncompensated shock.
11.08 Discuss evaluation of the patient's perfusion status.
11.09 Define and discuss acid-base balance.
11.10 Describe indications and contraindications of the pneumatic anti-shock garment.
11.11 Discuss the methods of fluid replacement and the advantages and disadvantages of each.
11.12 Demonstrate, in order of priority, the steps in shock resuscitation.
11.13 Demonstrate the use of the pneumatic anti-shock garment.
11.14 Demonstrate proper technique of setting up intravenous fluids for administration.
11.15 Demonstrate proper technique of peripheral and external jugular venous cannulation on the adult, child and infant patient.
11.16 Demonstrate proper techniques for trouble-shooting an intravenous infusion.
11.17 Calculate fluid administration rates for intravenous fluids utilizing a variety of administration sets.

12.0 DEMONSTRATE KNOWLEDGE OF PHARMACOLOGY AND ADMINISTER MEDICATIONS -- The student will be able to:

12.01 Discuss the various origins and forms of drugs.
12.02 Discuss the various names of a drug (ie. generic, trade, official, chemical).
12.03 Identify those agencies responsible for regulating drugs and the rationale for regulation.
12.04 Demonstrate use of the Physicians Desk Reference.
12.05 Identify local and systemic effects of drugs.
12.06 List and evaluate effects of various factors on the action of drugs.
12.07 Discuss the methods of drug absorption.
12.08 Define and use relevant pharmacology terms.
12.09 Describe and discuss the apothecary and metric systems and convert between and within the systems.
12.10 Describe the various types of drugs and routes of administration.
12.11 Calculate fractional drug dosages.
12.12 State the advantages and disadvantages of subcutaneous, intramuscular, intravenous, and transtracheal injections.
12.13 Demonstrate the proper procedure for intramuscular, subcutaneous, intravenous piggyback, intravenous bolus, and transtracheal medication administration.
12.14 Demonstrate the proper procedure for withdrawing medication from a glass vial and a glass ampule.

13.0 ASSESS AND MANAGE TRAUMA EMERGENCIES -- The student will be able to:

13.01 Describe the general care and transportation of the trauma patient.
13.02 Describe the priorities of trauma care and triage with multiple patients.

13.03 Describe the anatomy, physiology, pathophysiology assessment, and management of trauma to all regions of the human body.
13.04 Describe and demonstrate methods of hemorrhage control.
13.05 Describe neurological examination, assessment, pathophysiology, and management.
13.06 Describe rapid on-scene management of the trauma patient.
13.07 Describe the components of a complete prehospital history and the significance of each.
13.08 Describe various types of splints that are used for immobilization of fractures and dislocations, their use and the advantages and disadvantages of each.
13.09 Describe the short and long backboard, the various state-of-the-art substitutes available, and their specific uses.
13.10 Describe various systems designed for scoring the severity of injuries of the trauma patient.
13.11 Identify and describe the use of a trauma score in quantifying patient condition.
13.12 Demonstrate advanced methods of airway management and ventilation in the trauma patient.
13.13 Demonstrate decompression of a tension pneumothorax.
13.14 Demonstrate application of pneumatic anti-shock garment (MAST).
13.15 Describe and demonstrate physical examination of the trauma patient.
13.16 Demonstrate a neurological examination as performed on the trauma patient.
13.17 Demonstrate immobilization of the cervical spine.
13.18 Demonstrate splinting techniques.

14.0 ASSESS AND MANAGE BURN INJURIES -- The student will be able to:

14.01 Describe the anatomy, physiology, pathophysiology, and assessment of the integumentary system.
14.02 Discuss the movement of body fluids between plasma, interstitial compartments and intracellular compartments.
14.03 Describe the assessment and management of the burn victim.
14.04 Describe the pathophysiology and treatment of burn shock.
14.05 Describe and discuss the major causes, classifications, and categories of burn.
14.06 Describe and discuss the method of calculating percentages of body surface area burned and various formulas for calculating fluid resuscitation.
14.07 Describe the assessment and management of inhalation injury.
14.08 Demonstrate management of the burn victim with and without associated injuries.

15.0 ASSESS AND MANAGE RESPIRATORY EMERGENCIES -- The student will be able to:

15.01 Describe the anatomy and physiology of the respiratory system and define appropriate medical terms.
15.02 Identify the normal partial pressures of oxygen and carbon dioxide in the alveoli, arterial and venous blood, and factors that affect those levels.
15.03 Describe the normal and COPD respiratory drives.
15.04 Identify the pharmacology, actions, indications, precautions, dosages, contraindications, and side effects of typical respiratory drugs for the adult and pediatric patient and demonstrate methods of administration.
15.05 Discuss the signs, symptoms, and pathophysiology of conditions affecting the respiratory system.
15.06 Demonstrate inspection, auscultation and palpation of the thorax.
15.07 Identify normal and abnormal lung sounds.
15.08 Obtain a history and assess patients with respiratory complaints.
15.11 Describe the management of patients with respiratory problems.

16.0 ASSESS AND MANAGE CARDIOVASCULAR EMERGENCIES

-- The student will be able to:

16.01 Describe the anatomy, physiology, and pathophysiology relevant to cardiovascular disease and emergencies.
16.02 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of common emergency cardiovascular drugs (AHA/ACLS).
16.03 Identify complications of intracardiac injections.
16.04 Describe innervation of the heart, sympathetic and parasympathetic stimulation, blockade, and effects on the heart rate.
16.05 Discuss myocardial electrical physiology.
16.06 Describe signs, symptoms, and common chief complaints of patients with cardiac conditions.
16.07 Identify and describe the historical information, specific observations, and physical findings to be evaluated in the cardiac patient.
16.08 Identify actions, uses, and side effects of common prescription drugs relative to cardiac problems.
16.09 Discuss the etiology of cardiac arrest in adults and pediatric patients.
16.10 Discuss concepts of ECG monitoring, types and causes of artifacts, and rhythm analysis format.
16.11 Identify the wave forms, intervals, and normal values relative to an electrocardiogram (ECG).
16.12 Describe a 12-lead ECG and compare to continuous monitoring.
16.13 Describe the etiology, clinical significance, and ECG characteristics of cardiac dysrhythmias.
16.14 Describe the indications for use of a precordial thump, vago tonic maneuvers, synchronized cardioversion, and defibrillation and discuss energy recommendations for adult and pediatric patients.
16.15 Identify wave forms, artifacts, and dysrhythmias on Lead or MCL1 rhythm strips and oscilloscope.
16.16 Obtain history, assess, and manage dysrhythmias or cardiac condtion.
16.17 Demonstrate application of ECG electrodes and obtain a sample Lead II or MCL1 rhythm strip.
16.18 Use defibrillator paddles for Lead II monitoring.
16.19 Troubleshoot a poor ECG rhythm.
16.20 Perform a precordial thump, vago tonic maneuvers, synchronized cardioversio, defibrillation, and external cardiac pacing.
16.21 Use a mechanical CPR device.

17.0 ASSESS AND MANAGE ENDOCRINE EMERGENCIES

-- The student will be able to:

17.01 Identify and describe the anatomy, physiology, pathophysiology of the endocrine system.
17.02 Describe the assessment and management of endocrine emergencies.
17.03 Identify and discuss the significance of the historical information, observations, and physical findings in the patient with endocrine disorders.
17.04 Identify common prescription drugs that a patient with endocrine problems might take and the implications of each.
17.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
17.06 Obtain a history and assess and manage patients with endocrine problems.
17.07 Administer relevant drugs.

18.0 ASSESS AND MANAGE NEUROLOGICAL EMERGENCIES

-- The student will be able to:

18.01 Identify and describe the anatomy, physiology, pathophysiology of

the neurological system.
18.02 Describe the assessment and management of neurological disorders.
18.03 Identify the actions, uses and side effects of common prescription drugs relative to neurological problems.
18.04 Identify common prescription drugs that a patient with neurological problems might take and the implications of each.
18.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
18.06 Describe and use the Glasgow Coma Scale.
18.07 Describe and differentiate various types of seizures and their phases.
18.08 Obtain history and assess patients with neurological disorders.
18.09 Manage patients with neurological emergencies.

19.0 ASSESS AND MANAGE DIGESTIVE, GENITOURINARY, AND REPRODUCTIVE EMERGENCIES -- The student will be able to:

19.01 Describe the anatomy, physiology, pathophysiology of the digestive, genitourinary and reproductive systems.
19.02 Identify and describe the significance of the historical information, observations, and physical findings in the patient with digetive, genitourinary, and reproductive disorders.
19.03 Describe the assessment and treatment of digestive, genitourinary, and reproductive system disorders.
19.04 Identify common prescription drugs that a patient with digestive, genitourinary, and reproductive problems might take and the implications of each.
19.05 Discuss the basic principles, types, and complications of dialysis.
19.06 Discuss the assessment and management of the dialysis patient, to include vascular access.
19.07 Obtain a history and assess patients with digestive, genitourinary, and reproductive problems.
19.08 Manage patients with digestive, genitourinary, and reproductive emergencies.

20.0 ASSESS AND MANAGE ANAPHYLAXIS EMERGENCIES
-- The student will be able to:

20.01 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of anaphylaxis.
20.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with potential anaphylaxis.
20.03 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects for the adult and pediatric patient for epinephrine, diphenhydramine, aminophylline, and dexamethasone.
20.04 Obtain a history and assess patients with potential anaphylaxis.
20.05 Manage patients with anaphylactic emergencies.
20.06 Administer epinephrine, diphenhydramine, aminophylline, and dexamethasone to the adult and pediatric patient.

21.0 ASSESS AND MANAGE TOXICOLOGY, ALCOHOLISM, AND DRUG ABUSE EMERGENCIES
-- The student will be able to:

21.01 Discuss toxicologic emergencies.
21.02 Identify and discuss the routes of entry of toxic substances into the body.
21.03 Discuss the role of Poison Control Centers in the EMS system and in the management of patients with toxicological emergencies.
21.04 Define abuse terms, identify commonly abused drugs, and describe their effects.
21.05 Describe the anatomy, physiology, pathophysiology assessment and management of patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.

21.06 Discuss the incidence of alcoholism, drug abuse, and substance abuse in the United States.
21.07 obtain a history, assess, and manage patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.
21.08 Administer relevant drugs.
21.09 Apply a constricting band.

22.0 ASSESS AND MANAGE INFECTIOUS DISEASES

-- The student will be able to:

22.01 Define terms and conditions relative to infectious diseases.
22.02 Describe the anatomy, physiology, pathophysiology, causes, mode of transmission, incubation period, assessment and management typical infectious and communicable diseases and parasites.
22.03 Identify and discuss the significance of historical information, observations, and physical findings in the patient with infectious/communicable disease or parasites.
22.04 Practice Universal Precautions according to Center for Disease Control Guidelines (CDC).
22.05 Discuss procedures for reporting and follow-up after exposure to a communicable disease, according to established standards.
22.06 Describe methods used to disinfect equipment and vehicles involved with an infectious patient.
22.07 Obtain a history and assess patients with infectious/communicable disease or parasites.
22.08 Manage patients with infectious/communicable disease or parasites.

23.0 ASSESS AND MANAGE ENVIRONMENTAL INJURIES

-- The student will be able to:

23.01 Describe and discuss homeostasis, methods of body temperature regulation and the role and methods of thermoregulation and heat dissipation and retention in pathologic circumstances.
23.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with hypothermic or hyperthermic disorders.
23.03 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of hypothermic or hyperthermic disorders.
23.04 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of near-drowning.
23.05 Identify and discuss the significance of historical information, observations, and physical findings in the patient with a near-drowning emergency.
23.06 State the factors affecting survivability and probability of successful resuscitation in near-drowning patients.
23.07 Identify the common types and sources of ionizing radiation.
23.08 Identify sources of normal background radiation.
23.09 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of acute and/or chronic exposure to ionizing radiation.
23.10 Identify and discuss the significance of historical information, observations, and physical findings in the patient with acute and/or chronic exposure to ionizing radiation.
23.11 Discuss the safety of allied health personnel and patients related to exposure to ionizing radiation.
23.12 Discuss procedures relating to radiological incidents for notification of appropriate health officials.
23.13 List the common medical problems associated with scuba diving accidents.
23.14 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of decompression sickness, overpressure accidents, pneumomediastinum, air embolism, nitrogen narcosis, and subcutaneous emphysema.

23.15 Identify and discuss the significance of historical information, observations, and physical findings in patients with decompression sickness, overpressure accidents, pneumomediastimum, air embolism, nitrogen narcosis, and subcutaneous emphysema, and the significance of each.
23.16 Obtain a history and assess patients with hypothermic and hyperthermic problems.
23.17 Discuss management of patients with hypothermic and hyperthermic complaints.
23.18 Obtain a history and assess patients with exposure to ionizing radiation.
23.19 Discuss management of patients with exposure to ionizing radiation.
23.20 Obtain a history and assess patients with near-drowning emergencies.
23.21 Discuss management of patients with near-drowning emergencies.
23.22 Obtain a history and assess patients with scuba diving emergencies.
23.23 Discuss management of patients with scuba diving emergencies.

24.0 ASSESS AND MANAGE GERIATRIC EMERGENCIES

-- The student will be able to:

24.01 Identify the physical, social and psychological differences between youth and the elderly.
24.02 Identify and discuss the significance of historical information, observations, and physical findings in the geriatric patient with acute and/or chronic medical problems.
24.03 Identify and discuss illness/complaints that require special consideration in the elderly.
24.04 Describe the anatomy, physiology, pathophysiology, assessment and management of common geriatric illnesses.
24.05 Obtain a history and assess geriatric patients.
24.06 Treat geriatric patients.
24.07 Discuss geriatric abuse.
24.08 Discuss the components and objectives of a gerontology program.

25.0 ASSESS AND MANAGE PEDIATRIC EMERGENCIES

-- The student will be able to:

25.01 Identify the general goals of management of the pediatric patient.
25.02 Discuss specific historical information and its sources in evaluating the pediatric patient.
25.03 Discuss by age groups the relevant aspects of normal growth and development, personality development, relatiohship to parents, history factors, common illnesses and accidents.
25.04 Describe Sudden Infant Death Syndrome (SIDS), current theories, assessment and management, and the immediate needs of the family.
25.05 Describe the characteristics of the child abuser and the abused child.
25.06 Discuss the assessment and management of the potentially abused child including important historical information and management of the family in the child abuse situation.
25.07 Recognize and report child abuse.
25.08 Describe the anatomy, physiology, pathophysiology, assessment, and management of common pediatric disorders.
25.09 Identify the pediatric dosage for relevant drugs (AHA/ACLS).
25.10 Discuss and demonstrate techniques for airway maintenance in the pediatric patient.
25.11 Describe and discuss techniques and sites for intravenous infusion in the pediatric patient.
25.12 Obtain history and assess the pediatric patient.

26.0 ASSESS AND MANAGE THE GYNECOLOGIC PATIENT

-- The student will be able to:

26.01 Describe the anatomy and physiology of the female reproductive system.
26.02 Identify and disucss the significance of historical information, observations, and physical findings to be evaluated in the patient's gynecologic problems.
26.03 Describe the pathophysiology and management of gynecological disorders.
26.04 Describe potential causes, assessment and management of trauma to the external genitalia.
26.05 Describe the assessment and management of a sexual assault victim.
26.06 Obtain a history and assess and manage the patient with a gynecologic problem.

27.0 ASSESS AND MANAGE THE OBSTETRIC PATIENT

-- The student will be able to:

27.01 Define obstetrical terminology.
27.02 Describe the process of fetal development and circulation.
27.03 Identify and discuss the significance of historical information, observations, and physical findings in the obstetric patient.
27.04 Identify and describe early signs and symptoms of pregnancy.
27.05 Describe potential causes, assessment, and management of trauma to the pregnant mother and the fetus.
27.06 Discuss the effects of pregnancy on pre-existing medical conditions.
27.07 Describe the anatomy, physiology, pathophysiology, causes, assessment and management of obstetric.
27.08 Describe Braxton-Hicks contractions.
27.09 Discuss the progression of labor.
27.10 Discuss factors that influence transport decisions for the patient in labor.
27.11 Describe a normal cephalic delivery.
27.12 Discuss the pathophysiology, assessment, and management ofdeliverycomplications.
27.13 Identify the pharmacology, actions, indications, methods of administration, dosages, contraindications and side effects of oxytocin.
25.14 Obtain a history and assess the obstetric patient.
25.15 Treat obstetrical patients, including assisting with childbirth.
25.16 Administer oxytocin.

28.0 ASSESS AND MANAGE THE NEONATE -- The student will be able to:

28.01 Describe anatomy, physiology, pathophysiology, assessment, and routine management of the neonate.
28.02 Describe the mechanisms and effects, and treatment of hypothermia in the neonate.
28.03 Define the parameters, numerical values utilized, and the procedure for Apgar scoring.
28.04 Describe and demonstrate stimulation of and CPR for the distressed neonate.
28.05 Identify observations and physical findings to be evaluated in the neonate.
28.06 Identify the problems and equipment requirements for transportation of the neonate.
28.07 Obtain a history, assess, and manage the neonate.
28.08 Administer oxygen to the neonate.
28.09 Suction the neonate using DeLee Suction and bulb syringe.
28.10 Calculate Apgar score.

29.0 ASSESS AND MANAGE BEHAVIORAL EMERGENCIES

-- The student will be able to:

29.01 Define behavioral emergency.
29.02 Discuss factors that may alter the emotional status of the ill or injured.
29.03 Discuss reasons and method of reassuring the patient experiencing and emotional crisis.
29.04 Discuss verbal communication techniques usful in managing the emotionally disturbed patient.
29.05 Discuss means to insure the safety of the Paramedic.
29.06 Discuss circumstances when bystanders and relatives should be removed from the scene.
29.07 Discuss factors which increase the risk of suicide and behaviors that are indicators of an impending suicide attempt.
29.08 Discuss the techniques that facilitate the systematic gathering and reporting of information about the disturbed patient.
29.09 Discuss techniques that are useful in managing the effects of crisis situations on the Paramedic.
29.10 Discuss techniques that are useful in redirecting anxiety in relatives and bystanders.
29.11 Discuss appropriate action of the Paramedic when confronted with an uncontrollable, armed patient.
29.12 Discuss those situations in which the Paramedic may forcibly restrain or transport a patient.
29.13 Discuss and demonstrate techniques for restraining the violent patient.
29.14 Discuss and demonstrate techniques useful in protecting the Paramedic when attached by a violent patient.
29.15 Obtain a history, assess, and manage patients with behavioral emergencies.

30.0 DEMONSTRATE EMPLOYABILITY SKILLS

-- The student will be able to:

30.01 Conduct a job search.
30.02 Secure information about a job.
30.03 Identify documents that may be required when applying for a job.
30.04 Complete a job application.
30.05 Demonstrate competence in job interview techniques.
30.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
30.07 Identify acceptable work habits.
30.08 Demonstrate knowledge of how to make job changes appropriately.
30.09 Demonstrate acceptable employee health habits.

31.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS

-- The student will be able to:

31.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
31.02 Identify community resources and services available to the victims of immune-deficiency diseases.
31.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
31.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
31.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Patient Care Assistant

CODE NUMBER: Secondary 8418200 Postsecondary H170692

Florida CIP 0317.069902

SECONDARY SCHOOL CREDITS 3 COLLEGE CREDITS ____ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 11-12, 30-31

CERTIFICATION COVERAGE: PRAC NURSE @ 7 G NURSING ED @ 5

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare Health Care Technicians, (70060400) Patient Care Assistants, or Patient Care Technician students for employment as health care technicians or patient care assistants, or to provide supplemental training for persons previously or currently employed in any of these occupations. This program offers a broad foundation of knowledge and skills, expanding the traditional role of the nursing assistant. Reinforcement of basic skills in English, Mathematics, and Science appropriate for the job preparatory programs, occur through vocational classroom instruction and applied laboratory procedures or practice. Upon completion, the graduate will be prepared to care for patients in hospitals, nursing homes, home health agencies or private homes. This program is designed to prepare the graduate to function within the changing health-care industry. Successful completion of the program qualifies the student to take the certification examination for Nursing Assistant. Such certification is required for employment in a nursing home, in accordance with Chapter 82-163, Florida Statutes. This program also meets the requirements of Home Health Aide as stated in Rules of the Department of Health and Rehabilitative services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies.

The program content includes, but is not limited to, the study of interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work practices, recording skills, basic patient care, the life span (including gerontology), nutrition, health and safety including Cardio-Pulmonary Resuscitation (CPR)-heart saver level, and employability skills.

Listed below are the courses that this program comprises when offered at the secondary level:

8418210	Patient Care Assistant 1
8418220	Patient Care Assistant 2
8418230	Patient Care Assistant 3

II. LABORATORY ACTIVITIES: Students will perform nursing skills in a clinical setting for approximately one-half of the program, under the supervision of a qualified registered nurse instructor.

Clinical learning experiences must correlate with didactic instructional and laboratory experiences.

For nursing-assistant certification, 40 hours of clinical learning experiences must be obtained, 20 of which must be in a licensed nursing home.

III. SPECIAL NOTE: Those students who have completed the approved nursing assistant program may enter this program with advanced standing.

The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership-training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following are required for each student: (1) a training plan, signed by the student, the teacher, and the employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station with appropriate equipment, where relevant skills and tasks can be performed. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic-skills grade levels required for this postsecondary adult vocational program are Mathematics 7.0, Language 8.0, and Reading 8.0. These grade-level numbers correspond to grade-equivalent scores obtained on state-designated basic-skills examinations.

The typical length of this program for the average-achieving student is 300 hours.

The particular outcomes and student performance standards that a handicapped student must master for each credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

A student who completes this program may substitute a required science credit in accordance with the Pupil Progression Plan. Students completing this program with a 3.5 GPA will be eligible for the Gold Seal Endorsement.

Completion of this program should enable the postsecondary student to be given advanced standing in the Practical Nursing program PRN0990.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Use verbal and written communications.
02. Apply basic math skills.
03. Apply basic science skills.
04. Demonstrate legal and ethical responsibilities.
05. Provide emergency care.
06. Describe the anatomy and physiology of the human body.
07. Perform physical comfort and safety functions.
08. Provide personal patient care.
09. Perform nursing procedures.
10. Apply principles of nutrition.
11. Provide care for geriatric patients.
12. Apply the principles of infection control.
13. Provide biological, psychological, and social support.
14. Perform supervised management functions, following the patient plan of care.
15. Assist with restorative (rehabilitative) activities.
16. Perform home health-care services.
17. Demonstrate employability skills.
18. Demonstrate knowledge of the immune-deficiency diseases, including AIDS.
19. Provide care for the adult patient.
20. Demonstrate knowledge and understanding of care needed for clients with specific health problems.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8418200
PROGRAM TITLE: Patient Care Assistant POSTSECONDARY NUMBER: H170692

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

01.01 Identify and use various forms of communication.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Demonstrate proper telephone usage.
01.06 Demonstrate basic computer skills.
01.07 Demonstrate use of the intercom.
01.08 Receive and give oral report of patient's status
01.09 Properly identify patients.
01.10 Obtain specified data from patient and family.
01.11 Recognize and report changes in patient behavior and mental awareness.
01.12 Report objective, pertinent observations.
01.13 Utilize verbal and written information to assist with the patient's care plan.
01.14 Assist in explaining activities to patient.
01.15 Demonstrate effective teamwork as a member of the team.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

01.01 Read, interpret and report on graphs, charts and tables.
01.02 Make and use measurements in both traditional and metric units.
01.03 Make estimates and approximations and judge the reasonableness of the results.
01.04 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Demonstrate ability to evaluate and draw conclusions.
03.02 Demonstrate knowledge of anatomy and physiology of body systems.
03.03 Apply the principles of medical asepsis.

04.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

04.01 Demonstrate legal and ethical behavior within the role and scope of patient-care responsibilities.
04.02 Identify the role of each health-care team member.
04.03 Explain the patient's "Bill of Rights."
04.04 Maintain confidentiality of patient information.
04.05 Describe the purpose of the chain of command (i.e., to resolve patient or employee problems).
04.06 Follow policies and procedures affecting the health, safety, and well-being of patients.
04.07 Recognize and report signs and symptoms of abuse and neglect.
04.08 Recognize and report signs of substance abuse.
04.09 Follow legal guidelines in charting.
04.10 Exhibit behavior supporting and promoting residents' rights.

05.0 PROVIDE EMERGENCY CARE -- The student will be able to:

05.01 Perform emergency measures, including CPR (heart saver level) and the management of an obstructed airway.
05.02 Identify emergency evacuation procedures.

06.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY -- The student will be able to:

06.01 Describe the basic structure and function of body systems.
06.02 Describe the relationships of body systems in providing patient care.

07.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS -- The student will be able to:

07.01 Care for equipment and supplies.
07.02 Maintain patient units.
07.03 Maintain service areas on the units.
07.04 Observe and report patient's behavior daily, including mental awareness.
07.05 Adjust bed and siderails.
07.06 Lift, hold, or transfer a patient, using good body mechanics.
07.07 Transfer patient, using mechanical lifters.
07.08 Transfer patient to stretcher.
07.09 Turn and position patient.
07.10 Apply protective devices as directed (e.g., vest and belt).
07.11 Apply comfort devices as directed (e.g., footboard, overbed cradle, alternating pressure mattress).
07.12 Assist patient to dangle.
07.13 Assist patient in ambulation, including the use of a crutch, cane, or walker.
07.14 Assist patient in using a wheelchair.
07.15 Assist patient with the care and use of prosthetic/orthotic devices.
07.16 Administer back rub.

08.0 PROVIDE PERSONAL PATIENT CARE -- The student will be able to:

08.01 Give bed bath.
08.02 Assist with shower or tub bath, including the use of specialty tubs.
08.03 Assist patient with sink, tub, shower, or bed shampoo.
08.04 Shave patient.
08.05 Groom patient, including hair, skin, foot, and nail care.
08.06 Assist with and/or administer oral hygiene.
08.07 Assist patient with toileting.
08.08 Assist patient to dress.
08.09 Assist patient with meals.
08.10 Provide bowel and bladder training.
08.11 Give perineal care.

09.0 PERFORM NURSING PROCEDURES -- The student will be able to:

09.01 Admit patient.
09.02 Transfer patient.
09.03 Discharge patient.
09.04 Make unoccupied/occupied bed.
09.05 Make surgical bed.
09.06 Measure and record patient's pulse and respiration.
09.07 Measure and record patient's blood pressure.
09.08 Measure and record patient's temperature.
09.09 Measure and record patient's height and weight.
09.10 Assist patient in passive range-of-motion exercises.
09.11 Apply anti-embolic hose.
09.12 Collect, strain, and/or test routine urine specimen.
09.13 Collect timed urine specimen.
09.14 Monitor catheter drainage system.
09.15 Collect clean-catch (midstream-voided) urine specimen.
09.16 Monitor fluid intake and output (I&O).
09.17 Observe, record, and report patient's emesis.
09.18 Prepare hot and cold applications and assist nurse to apply them.
09.19 Assist patient with sitz bath.
09.20 Monitor and assist with care of catheters.
09.21 Assist patient to apply binders.

09.22 Care for patient in skin and skeletal traction.
09.23 Reinforce dressings.
09.24 Assist with ostomy care.
09.25 Collect stool specimen.
09.26 Perform postmortem care.
09.27 Maintain patient-belongings list.
09.28 Administer prepackaged enema of 5 ounces or less.
09.29 Care for patients with nasal, gastrostomy, and/or intravenous tubes.
09.30 Assist with preoperative and postoperative patient care.

10.0 APPLY PRINCIPLES OF NUTRITION -- The student will be able to:

10.01 Identify nutrients and food groups.
10.02 Explain regional, cultural, and religious food preferences.
10.03 Describe special diets.
10.04 List factors that must be considered when purchasing food.
10.05 Prepare a basic food plan.
10.06 List factors that must be considered when storing food.
10.07 Check patient's diet tray for accuracy.
10.08 Identify methods of maintaining fluid balance.

11.0 PROVIDE CARE FOR GERIATRIC PATIENTS -- The student will be able to:

11.01 Identify safety principles as related to the elderly.
11.02 Describe general characteristics, particular needs, and problems of the elderly.
11.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
11.04 Distinguish between fact and fallacy about the aging process.
11.05 Identify community resources and services available to the elderly.
11.06 Apply Reality Orientation Techniques and Validation Therapy.
11.07 Provide and involve patients in diversional activities.
11.08 Identify common alterations in elderly patient behavior.
11.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

12.0 APPLY THE PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

12.01 Wash hands.
12.02 Provide care for patients with infectious diseases.
12.03 Identify the public education needed to combat the spread of sexually transmitted diseases.
12.04 Practice Universal Precautions according to the Centers for Disease Control guidelines.
12.05 Set up an isolation unit.
12.06 Follow isolation procedures with food tray, garments, and other materials.
12.07 Collect specimen from patient in isolation.

13.0 PROVIDE BIOLOGICAL, PSYCHOLOGICAL, AND SOCIAL SUPPORT -- The student will be able to:

13.01 Identify basic human needs.
13.02 Discuss family roles and their significance to health.
13.03 List community resources for individual and family health.
13.04 Identify components of the grief process.
13.05 Respond to patient and family emotional needs.

14.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE -- The student will be able to:

14.01 Organize patient-care assignments.
14.02 Complete assignments accurately and in a timely manner.

15.0 ASSIST WITH RESTORATIVE (REHABILITATIVE) ACTIVITIES -- The student will be able to:

15.01 List the purposes of restorative (rehabilitation) programs.
15.02 Assist patient with specified restorative (rehabilitation) needs.
15.03 Assist patients/residents to reach the optimum level of independence.

16.0 PERFORM HOME HEALTH-CARE SERVICE -- The student will be able to:

16.01 Follow an established work plan with the patient and family.
16.02 Perform patient-related cleaning tasks and laundry.
16.03 Identify methods for medication storage.
16.04 Assist patient with taking self-administered prescribed medication in the home.

17.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

17.01 Conduct a job search.
17.02 Secure information about a job.
17.03 Identify documents that may be required when applying for a job.
17.04 Complete a job application.
17.05 Demonstrate competence in job-interview techniques.
17.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other person.
17.07 Identify acceptable work habits.
17.08 Demonstrate knowledge of how to make job changes appropriately.
17.09 Demonstrate acceptable employee health habits.

18.0 DEMONSTRATE KNOWLEDGE OF THE IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

18.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
18.02 Identify community resources and services available to the victims of the immune-deficiency disease AIDS.
18.03 Identify risky behaviors that promote the spread of AIDS and the public education needed to combat its spread.
18.04 Follow the Centers for Disease Control (CDC) guidelines to prevent the spread of AIDS.
18.05 Identify the legal aspects of AIDS.

19.0 PROVIDE CARE FOR THE ADULT PATIENT -- The student will be able to:

19.01 Insert a rectal tube.
19.02 Administer soap suds enema.
19.03 Administer a Harris flush.
19.04 Empty urinary drainage output.
19.05 Collect urine specimen from foley catheter.
19.06 Assist with physical examination.
19.07 Collect sputum specimen.
19.08 Care for patients receiving oxygen therapy.
19.09 Change an unsterile dressing.
19.10 Take an apical pulse.
19.11 Take an apical-radial pulse.
19.12 Take pedal pulse.
19.13 Give a vaginal irrigation.
19.14 Force and restrict fluids.
19.15 Give cast care.
19.16 Give artificial eye care.

20.0 DEMONSTRATE KNOWLEDGE AND UNDERSTANDING FOR NEEDS OF PATIENT WITH SPECIFIC HEALTH PROBLEMS -- The student will be able to:

20.01 Assist a patient having a seizure.
20.02 Assist patients with spinal cord injuries.

20.03 Assist patients with arthritis.
20.04 Assist patients with diabetes.
20.05 Assist the blind patient with basic needs.
20.06 Assist a patient with AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations COURSE CREDIT: 8418200

PROGRAM TITLE: Patient Care Assistant PROGRAM NUMBER: 8418200

COURSE TITLE: Patient Care Assistant 1 COURSE NUMBER: 8418210

COURSE DESCRIPTION: This course is designed to provide students with nurse assistant, home-health aide and gerontology aide job-related competencies such as communication skills, legal and ethical behavior, employability skills, and knowledge of the function, interrelatedness, and needs of the human body systems. Patient care activities of daily living, health, and hygiene are provided for all age groupings, with particular emphasis on gerontology. Clinical experiences are provided under the direct supervision of the teacher, in licensed nursing homes, hospitals, and home-health agencies. Written contractual agreements are required for each agency. Patient and worker safety is stressed.

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

01.01 Distinguish between factual reports and personal opinion.
01.02 Identify and use various forms of communication.
01.03 Identify barriers to communication.
01.04 Use basic medical terminology and approved abbreviations.
01.05 Demonstrate effective interpersonal relationships.
01.06 Receive and give oral report of a patient's status.
01.07 Report and record objective, pertinent observations in written or oral form.
01.08 Maintain current documentation.
01.09 Obtain specified data from patient and family.
01.10 Utilize verbal and written information to assist with the patient's care plan.
01.11 Demonstrate basic computer skills.
01.12 Communicate effectively via telephone (e.g., take messages, give appropriate information, and transfer calls).

02.0 DEMONSTRATE APPLICATION OF BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze, and report on graphs, charts, and tables.
02.02 Measure time, temperature, distance, capacity, and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 DEMONSTRATE BASIC COMPETENCIES IN SCIENCE -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

04.01 Demonstrate legal and ethical behavior within the role and scope of patient-care responsibilities.
04.02 Identify the role of each health-care team member.
04.03 Explain the patient's "Bill of Rights."
04.04 Maintain confidentiality of patient information.
04.05 Describe the purpose of the chain of command (i.e., to resolve patient or employee problems).
04.06 Follow policies and procedures affecting the health, safety, and

well-being of patients.
04.07 Recognize and report signs and symptoms of abuse and neglect.
04.08 Recognize and report signs of substance abuse.
04.09 Follow legal guidelines in charting.
04.10 Exhibit behavior supporting and promoting residents' rights.

05.0 PROVIDE EMERGENCY CARE -- The student will be able to:

05.01 Perform emergency measures, including CPR (heart saver level) and the management of an obstructed airway.
05.02 Identify emergency evacuation procedures.

06.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY -- The student will be able to:

06.01 Describe the basic structure and function of body systems.
06.02 Describe the relationships of body systems in providing patient care.

07.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS -- The student will be able to:

07.01 Care for equipment and supplies.
07.02 Maintain patient units.
07.03 Maintain service areas on the units.
07.04 Observe and report patient's behavior daily, including mental awareness.
07.05 Adjust bed and siderails.
07.06 Lift, hold, or transfer a patient, using good body mechanics.
07.07 Transfer patient using, mechanical lifters.
07.08 Transfer patient to stretcher.
07.09 Turn and position patient.
07.10 Apply protective devices as directed (e.g., vest, and belt).
07.11 Apply comfort devices as directed (e.g., footboard, overbed cradle, alternating pressure mattress).
07.12 Assist patient to dangle.
07.13 Assist patient in ambulation, including the use of a crutch, cane, or walker.
07.14 Assist patient in using a wheelchair.
07.15 Assist patient with the care and use of prosthetic/orthotic devices.
07.16 Administer a back rub.

10.0 APPLY PRINCIPLES OF NUTRITION -- The student will be able to:

10.01 Identify nutrients and food groups.
10.02 Explain regional, cultural, and religious food preferences.
10.03 Describe special diets.
10.04 List factors that must be considered when purchasing food.
10.05 Prepare a basic food plan.
10.06 List factors that must be considered when storing food.
10.07 Check patient's diet tray for accuracy.
10.08 Identify methods of maintaining fluid balance.

11.0 PROVIDE CARE FOR GERIATRIC PATIENTS -- The student will be able to:

11.01 Identify safety principles as related to the elderly.
11.02 Describe general characteristics, particular needs, and problems of the elderly.
11.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
11.04 Distinguish between fact and fallacy about the aging process.
11.05 Identify community resources and services available to the elderly.
11.06 Apply Reality Orientation Techniques and Validation Therapy.
11.07 Provide and involve patients in diversional activities.
11.08 Identify common alterations in elderly patient behavior.

11.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

13.0 PROVIDE BIOLOGICAL PSYCHOLOGICAL, AND SOCIAL SUPPORT

-- The student will be able to:

13.01 Identify basic human needs.
13.02 Discuss family roles and their significance to health.
13.03 List community resources for individual and family health.
13.04 Identify components of the grief process.
13.05 Respond to patient and family emotional needs.

18.0 DEMONSTRATE KNOWLEDGE OF THE IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS

--The student will be able to:

18.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
18.02 Identify community resources and services available to the victims of the immune-deficiency disease AIDS.
18.03 Identify risky behaviors that promote the spread of AIDS and the public education needed to combat its spread.
18.04 Follow the Centers for Disease Control (CDC) guidelines to prevent the spread of AIDS.
18.05 Identify the legal aspects of AIDS.

STUDENT PERFORMANCE STANDARDS		EFFECTIVE DATE:	July, 1993
PROGRAM AREA:	Health Occupations	COURSE CREDIT:	_
PROGRAM TITLE:	Patient Care Assistant	PROGRAM NUMBER:	8418200
COURSE TITLE:	Patient Care Assistant 2	COURSE NUMBER:	8418210

COURSE DESCRIPTION: Clinical experiences are continued. Patient Care Assistant 1 is the prerequisite to this course. Patient care activities including specified treatments and procedures are practiced. Patient safety is taught in relation to all treatments practiced. Patient needs for rehabilitation, tender loving care, and well-being are stressed. Employability skills are gained.

08.0 PROVIDE PERSONAL PATIENT CARE -- The student will be able to:

08.01 Give bed bath.
08.02 Assist with shower or tub bath, including the use of specialty tubs.
08.03 Assist patient with sink, tub, shower, or bed shampoo.
08.04 Shave patient.
08.05 Groom patient, including hair, skin, foot, and nail care.
08.06 Assist with and/or administer oral hygiene.
08.07 Assist patient with toileting.
08.08 Assist patient to dress.
08.09 Assist patient with meals.
08.10 Provide bowel and bladder training.
08.11 Give perineal care.

09.0 PERFORM NURSING PROCEDURES -- The student will be able to:

09.01 Admit patient.
09.02 Transfer patient.
09.03 Discharge patient.
09.04 Make unoccupied/occupied bed.
09.05 Make surgical bed.
09.06 Measure and record patient's pulse and respiration.
09.07 Measure and record patient's blood pressure.
09.08 Measure and record patient's temperature.
09.09 Measure and record patient's height and weight.
09.10 Assist patient in passive range-of-motion exercises.
09.11 Apply anti-embolic hose.
09.12 Collect, strain, and/or test routine urine specimen.
09.13 Collect timed urine specimen.
09.14 Monitor catheter drainage system.
09.15 Collect clean-catch (midstream voided) urine specimen.
09.16 Monitor fluid intake and output (I&O).
09.17 Observe, record, and report patient's emesis.
09.18 Prepare hot and cold applications and assist nurse to apply them.
09.19 Assist patient with sitz bath.
09.20 Monitor and assist with care of catheters.
09.21 Assist patient to apply binders.
09.22 Care for patient in skin and skeletal traction.
09.23 Reinforce dressings.
09.24 Assist with ostomy care.
09.25 Collect stool specimen.
09.26 Perform postmortem care.
09.27 Maintain patient-belongings list.
09.28 Administer prepackaged enema of 5 ounces or less.
09.29 Care for patients with nasal, gastrostomy, and/or intravenous tubes.
09.30 Assist with preoperative and postoperative patient care.

12.0 APPLY THE PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

12.01 Wash hands.
12.02 Provide care for patients with infectious diseases.
12.03 Identify the public education needed to combat the spread of sexually transmitted diseases.
12.04 Practice Universal Precautions according to the Centers for Disease Control guidelines.
12.05 Set up an isolation unit.
12.06 Follow isolation procedures with food tray, garments, and other materials.
12.07 Collect specimen from patient in isolation.

14.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE -- The student will be able to:

14.01 Organize patient-care assignments.
14.02 Complete assignments accurately and in a timely manner.

15.0 ASSIST WITH RESTORATIVE (REHABILITATIVE) ACTIVITIES -- The student will be able to:

15.01 List the purposes of restorative (rehabilitation) programs.
15.02 Assist patient with specified restorative (rehabilitation) needs.
15.03 Assist patients/residents to reach the optimum level of independence.

16.0 PERFORM HOME HEALTH-CARE SERVICE -- The student will be able to:

16.01 Follow an established work plan with the patient and family.
16.02 Perform patient-related cleaning tasks and laundry.
16.03 Identify methods for medication storage.
16.04 Assist patient with taking self-administered prescribed medication in the home.

17.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

17.01 Conduct a job search.
17.02 Secure information about a job.
17.03 Identify documents that may be required when applying for a job.
17.04 Complete a job application.
17.05 Demonstrate competence in job-interview techniques.
17.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other person.
17.07 Identify acceptable work habits.
17.08 Demonstrate knowledge of how to make job changes appropriately.
17.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations COURSE CREDIT: _

PROGRAM TITLE: Patient Care Assistant PROGRAM NUMBER: 8418200

COURSE TITLE: Patient Care Assistant 3 COURSE NUMBER: 8418230

Course Description: Clinical experiences are continued. Patient Care Assistant 1 and 2 are the prerequisites to this course. Patient care activities including specified treatments and procedures will be practiced with special emphasis focused on caring for the adult patient. Students will perform specific nursing skills related to adult care.

19.0 PROVIDE CARE FOR THE ADULT PATIENT -- The student will be able to:

19.01 Insert a rectal tube.
19.02 Administer soap suds enema.
19.03 Administer a Harris flush.
19.04 Empty urinary drainage output.
19.05 Collect urine specimen from foley catheter.
19.06 Assist with physical examination.
19.07 Collect sputum specimen.
19.08 Care for patients receiving oxygen therapy.
19.09 Change an unsterile dressing.
19.10 Take an apical pulse.
19.11 Take an apical-radial pulse.
19.12 Take pedal pulse.
19.13 Give a vaginal irrigation.
19.14 Force and restrict fluids.
19.15 Give cast care.
19.16 Give artificial eye care.

20.0 DEMONSTRATE KNOWLEDGE AND UNDERSTANDING FOR NEEDS OF PATIENT WITH SPECIFIC HEALTH PROBLEMS -- The student will be able to:

20.01 Assist a patient having a seizure.
20.02 Assist patients with spinal cord injuries.
20.03 Assist patients with arthritis.
20.04 Assist patients with diabetes.
20.05 Assist the blind patient with basic needs.
20.06 Assist a patient with AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Pharmacy Technician

CODE NUMBER: Secondary ______ Postsecondary H170507

Florida CIP 0317.050700

SECONDARY
ADULT
SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY VOCATIONAL CREDITS x

APPLICABLE LEVEL(S): _____7-9 _____9-12 X Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ Other 30, 31

CERTIFICATION COVERAGE: PHARMACY @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as pharmacy technicians (66026442), pharmacy assistants or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, metric system, medical terminology, medicinal drugs, pharmaceutical compounding, sterile techniques, maintenance of inventory, I.V. preparation, preparing purchase orders, receiving and checking supplies purchased, printing labels, typing prescription labels, delivering medications, pricing prescription drug orders and supplies, prepackaging unit dose packages, patient record systems, control records, data processing, computer application, employability skills, leadership and human relations skills, health and safety, including CPR.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory demonstration, practice and return demonstrations are essential in this program.

Clinical practicum experiences are an integral part of this program.

III. SPECIAL NOTE: An appropriate student organization for providing the development of professional and leadership skills should be provided. These organizations may include HOSA, or an organization of the school's choice. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

State credentialing will be done in accordance with Chapter 468 F.S. In accordance with Section 233.0695 F.S., minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 10.0, and Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a State designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee.

This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 1000 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of basic pharmaceutical chemistry, anatomy, and physiology.
02. Initiate measurement and calculating techniques.
03. Identify pharmaceutical abbreviations, terminology, and classifications.
04. Assist with adding medications to I.V. solutions.
05. Prepackage unit dose packets.
06. Perform clerical duties.
07. Prepare and deliver medications.
08. Practice human relations skills.
09. Identify medical and legal considerations.
10. Demonstrate employability skills.
11. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations SECONDARY NUMBER: _______
COURSE TITLE: Pharmacy Technician POSTSECONDARY NUMBER: H170507

01.0 DEMONSTRATE KNOWLEDGE OF BASIC PHARMACEUTICAL CHEMISTRY, ANATOMY, AND PHYSIOLOGY

-- The student will be able to:

01.01 Predict physical and chemical incompatibilities utilizing chemistry properties.
01.02 Describe electrolyte balances.
01.03 Relate the general classes of drugs and their main action and side effects to anatomy and physiology principles.

02.0 INITIATE MEASUREMENT AND CALCULATING TECHNIQUES

-- The student will be able to:

02.01 Explain the difference between a cubic centimeter and a milliliter.
02.02 Use common pharmaceutical weighing equipment.
02.03 Use common pharmaceutical volume measurement equipment.
02.04 Explain the technique of preparing a solution, a suspension, an elixir, and emulsion and an extract.
02.05 Convert measurements within the apothecary, avoirdupois, and metric systems.
02.06 Use the following arithmetic procedures: ratio and proportion; percentage.

03.0 IDENTIFY PHARMACEUTICAL ABBREVIATIONS, TERMINOLOGY, AND CLASSIFICATIONS

--The student will be able to:

03.01 List the major classifications of pharmaceuticals and define each.
03.02 List the sources from which medications are produced.
03.03 Define poison; define placebo.
03.04 Using the pharmacy inventory manual, prepare a listing of the usual adult dose for each item, the medicinal uses, the contraindications and route of administration.
03.05 List the two official compendia of standards for quality and purity of drugs and authoritative information on dosage and administration and list six non-official reference manuals.
03.06 Display knowledge of trade names and generic name equivalents, chemical names.
03.07 Use pharmaceutical medical terminology.
03.08 List the major symbols and abbreviations used on prescriptions and state the meaning of each.

04.0 ASSIST WITH ADDING MEDICATIONS TO I.V. SOLUTIONS

-- The student will be able to:

04.01 Compare medication order with label on vial and check expiration date of product.
04.02 Calculate drug dosage for parenteral use.
04.03 Identify common drug/drug incompatibilities.
04.04 Perform quality control check.
04.05 Prepare Parenteral Alimentation solutions.
04.06 Prepare Parenteral solutions.
04.07 Mix chemotherapeutic agents using proper safety techniques.
04.08 Use aseptic technique to withdraw medication from stock vial, measure correct quantity as instructed, select and insert it into IV solution without error.
04.09 Place label on IV solution container and keep records.
04.10 Reconstitute parenteral medications.
04.11 Use specialized equipment such as laminar flow hoods; filters, pumps, and vacuum sets; pipetters.

05.0 PREPACKAGE UNIT DOSE PACKETS -- The student will be able to:

05.01 Operate unit dose pre-packet equipment.
05.02 Label packets with the required information.
05.03 Locate correct stock container.
05.04 Weigh, measure or count required individual doses of drug.
05.05 Place individual dose in appropriate containers, repackage in predetermined quantities.
05.06 Distribute or shelve packets.

06.0 PERFORM CLERICAL DUTIES -- The student will be able to:

06.01 Maintain patient profiles.
06.02 Record information on patient profiles accurately.
06.03 Maintain stock inventory.
06.04 Prepare purchase orders.
06.05 Receive, store and distribute pharmaceuticals.
06.06 Type labels.
06.07 Price prescriptions and refunds.
06.08 Answer routine inquiries and refer pharmacologic inquires to pharmacist.
06.09 Demonstrate computer literacy.
06.10 Collect data from medication administration record and drug use evaluation form.
06.11 Check all new orders with medications listed on profiles.

07.0 PREPARE AND DELIVER MEDICATIONS -- The student will be able to:

07.01 Transport medications safely being aware of hazards: theft, legal implications of accidental loss, Harrison Narcotic Act - other consequences.
07.02 Identify hazards in hospitals such as false prescriptions, incorrect dosages, and impaired persons.
07.03 Identify special dangers to children, e.g. poisons.
07.04 Maintain controlled substances inventory.
07.05 Read and prepare medication orders correctly.

08.0 PRACTICE HUMAN RELATIONS SKILLS -- The student will be able to:

08.01 Interpret the hospital organizational chart.
08.02 Describe the general duties and responsibilities of personnel listed on the chart.
08.03 Establish and maintain a health rapport with co-workers.
08.04 Identify current trends and perspectives related to the management of health care organizations.
08.05 Identify the means by which the application of sound management principles and behavior can facilitate change.

09.0 IDENTIFY MEDICAL AND LEGAL CONSIDERATIONS -- The student will be able to:

09.01 Discuss the significance and scope of current national and Florida law and administrative rules as they relate to the practice of the pharmacy technician.
09.02 Discuss medical legal concepts as they relate to the practice of pharmacy technology.
09.03 Discuss the need for accurate medical documentation and recordkeeping.
09.04 State valid reasons for confidentiality of patient information.
09.05 Discuss the patients BILL OF RIGHTS/American Hospital Association.
09.06 Discuss the Harrison Narcotic Act.
09.07 List controlled substances.
09.08 Discuss "Right to Know" Act with respect to hazardous materials.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

10.01 Conduct a job search.
10.02 Secure information about a job.
10.03 Identify documents that may be required when applying for a job.
10.04 Complete a job application.
10.05 Demonstrate competence in job interview techniques.
10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
10.07 Identify acceptable work habits.
10.08 Demonstrate knowledge of how to make job changes appropriately.
10.09 Demonstrate acceptable employee health habits.

11.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS -- The student will be able to:

11.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases, including HIV infection.
11.02 Identify community resources and services available to the victims of sexually transmitted diseases.
11.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
11.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
11.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Phlebotomy Technician

CODE NUMBER: Secondary _______ Postsecondary H170301

Florida CIP 0317.030100

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____7-9 _____9-12 X Postsecondary Adult Vocational

_____ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: TEC MED @ 7 G LAB TECH @ 7 G
LAB ASST @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as phlebotomists (66099444) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, communication, leadership, human relations, and employability skills; performance of safe and efficient work practices in obtaining adequate and correct blood specimens by capillary or venipuncture on adults, children and neonates; maintaining the integrity of the specimen in relation to the test to be performed; preparing blood smears; labeling specimens accurately and completely; collecting timed specimens; promoting the comfort and well-being of the patient while performing blood collecting duties; observing safety policies and procedures; medical terminology; emergency procedures including CPR (Heartsaver); delivering a variety of clinical specimens to the clinical laboratory; sorting and recording specimens received in the laboratory; centrifuging specimens and preparing aliquots of samples according to the designated protocol; distributing samples to appropriate laboratory sections; and preparing collection trays for specimen procurement.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program. Clinical experience is defined as patient contact in which the student performs phlebotomy skills under the supervision of qualified health worker.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0,Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination. This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 150 hours.

IV. DEFINITIONS

Define: To describe the basic qualities and principles.
Demonstrate: To show by performance, simulation, explanation or illustration.
Identify: To physically select, indicate, or explain verbally/or in writing, using standard terms recognized in the clinical laboratory.

V. INTENDED OUTCOMES: After successfully completing the program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Demonstrate employability skills.
05. Demonstrate accepted professional, communication, and interpersonal skills.
06. Discuss phlebotomy in relation to the health care setting.
07. Identify the anatomic structure and function of body systems in relation to services performed by phlebotomist.
08. Recognize and identify collection reagents, supplies, equipment and interfering chemical substances.
09. Demonstrate skills and knowledge necessary to perform phlebotomy.
10. Practice infection control following universal precautions.
11. Practice accepted procedures of transporting, accessioning and processing specimens.
12. Practice quality assurance and safety.
13. Demonstrate knowledge of communicable diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______
PROGRAM TITLE: Phlebotomy Technician POSTSECONDARY NUMBER: MLT0042

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

01.01 Identify and use various forms of communication.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Maintain current documentation.
01.06 Demonstrate proper telephone usage.
01.07 Demonstrate basic computer skills.
01.08 Properly identify patients (check identification band, etc.).
01.09 Assist in explaining activities to patient.
01.10 Demonstrate effective teamwork as a member of the health care team.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Read, interpret and report on graphs, charts and tables.
02.02 Student will measure time, temperature, distance, capacity, and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and approximations and judge the reasonableness of the result.
02.05 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Organize and communicate the results obtained by observation.
03.02 Apply the principles of medical/surgical asepsis.
03.04 Demonstrate knowledge of anatomy and physiology of body systems.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a search for employment.
04.02 Assemble documents that may be required when applying for a job.
04.03 Complete an employment application correctly.
04.04 Identify acceptable interview techniques.
04.05 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.06 Identify and practice acceptable work habits and responsibilities.
04.07 Demonstrate awareness of personal wellness.

05.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS -- The student will be able to:

05.01 Recognize appropriate affective/professional behavior.
05.02 Communicate appropriately with the patients and members of the health care team.
05.03 Explain to the patient the procedure to be used in specimen collection.
05.04 Demonstrate understanding of patient rights and responsibilities.
05.05 Describe appropriate and legal use of the patient's medical records.
05.06 Demonstrate understanding of ethical behavior, professional liability, legal aspects, and the importance of following protocol.
05.07 Demonstrate correct use of the telephone and access basic computer information system.
05.08 Maintain acceptable appearance, grooming and personal hygiene (professionalism).

06.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING

-- The student will be able to:

06.01 List, classify and discuss various departments and services within the health care setting in which the phlebotomist must interact with to obtain laboratory specimens from patients.

06.02 Identify the major departments/sections with the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.

06.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

07.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST

-- The student will be able to:

07.01 Describe and define major body systems with emphasis on the circulatory system.

07.02 List and describe the main superficial veins used in performing venipunctures.

07.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).

07.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

08.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES

-- The student will be able to:

08.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.

08.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.

08.03 Identify and discuss proper use of supplies used in collecting microspecimens.

08.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.

08.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.

08.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.

08.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

09.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY

-- The student will be able to:

09.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.

09.02 Discuss/perform methods for facilitating capillary/venipuncture collection.

09.03 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.

09.04 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.

09.05 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and patient care.

09.06 Describe the correct order of draw during capillary and venipuncture.

09.07 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.

09.08 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.

09.09 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.

09.10 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation.

10.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS -- The student will be able to:

10.01 Define the term "nosocomial infection."
10.02 Describe/practice procedures for infection prevention.
10.03 Discuss/perform isolation procedures.
10.04 Identify potential routes of infection.
10.05 Recognize and properly handle biohazardous materials.

11.0 PRACTICE ACCEPTED PROCEDURES OF TRANSPORTING, ACCESSIONING AND PROCESSING SPECIMENS -- The student will be able to:

11.01 Describe routine procedures for transporting and processing specimens.
11.02 Describe the significance of time constraints for specimen collection and delivery.
11.03 Demonstrate knowledge of accessioning procedures.
11.04 Prepare aliquot(s) of specimen or component(s) for analysis according to specimen type and analysis to be performed.
11.05 Follow protocol for accepting verbal test orders.

12.0 PRACTICE QUALITY ASSURANCE AND SAFETY -- The student will be able to:

12.01 Distinguish and perform procedures which ensure reliability of test results when collecting blood specimens.
12.02 Demonstrate knowledge of and practice appropriate patient safety.
12.03 Practice laboratory safety in accordance with established procedures.
12.04 Follow documentation procedures for work related accidents.

13.0 DEMONSTRATE KNOWLEDGE OF COMMUNICABLE DISEASES, INCLUDING AIDS -- The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of communicable diseases, including HIV infection.
13.02 Identify community resources and services available to individuals with communicable diseases.
13.03 Identify "at risk behaviors" which promote the spread of AIDS/HIV and other sexually transmitted diseases (STD) and the education necessary to combat the spread of these diseases.
13.04 Apply universal precautions and infection control as recommended by Centers for Disease Control (CDC).
13.05 Demonstrate knowledge of legal aspects of AIDS.

CURRICULUM FRAMEWORK   PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION   EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Physical Therapist Aide

CODE NUMBER: Secondary ____   Postsecondary H170814

Florida CIP 0317.081400

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: PH THERAPY @6   PH THERTEC @7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as physical therapist aides (355.354-010) or to providesupplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, hospital operation, anatomy and physiology, patient care services, disabilities amenable to physical therapy, lifting and moving, positioning patients, role of the physical therapy aide, first aid, cardiopulmonary resuscitation (CPR), employability skills, human relations skills, health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocationalclassroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor andthe employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 7.0, Language 8.0, and Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for an average achieving student is 450 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Transport patients.
05. Assist therapist with various treatments/procedures.
06. Demonstrate safe, ethical and legal practice.
07. Demonstrate employability skills.
08. Recognize the role of the physical therapist aide.
09. Respond to patient's needs as reflected in the Patient's Bill of Rights.
10. Assist in preparing hot or cold treatments.
11. Perform routine maintenance of equipment.
12. Disinfect and sterilize materials and equipment.
13. Apply accepted principles of infection control.

STUDENT PERFORMANCE STANDARDS

PROGRAM AREA: Health Occupations

PROGRAM TITLE: Physical Therapist Aide

EFFECTIVE DATE: July, 1993

SECONDARY NUMBER: ________

POSTSECONDARY NUMBER: H170814

01.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

01.01 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
01.02 Distinguish between factual reports and personal opinion.
01.03 Report observations in written and oral form.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 TRANSPORT PATIENTS -- The student will be able to:

04.01 Move patient from bed to stretcher with assistance.
04.02 Move patient from bed to wheelchair.
04.03 Transport patients through hallways, doors, elevators, etc.
04.04 Use safety belts, holding devices.
04.05 Follow safety practices.
04.06 Describe differences in wheelchairs.

05.0 ASSIST THERAPIST WITH VARIOUS TREATMENTS/PROCEDURES -- The student will be able to:

05.01 State the benefits of exercise.
05.02 Define "splint" and "brace" and state the importance of proper fit and use of comfort measures.
05.03 Assist therapist to ambulate patient.
05.04 Assist therapist with application of external bandages, dressings and support devices.
05.05 Perform crutch walking, stair climbing, use of wheelchair.
05.06 Record treatments on billing forms or into computer according to policy.

06.0 DEMONSTRATE SAFE, ETHICAL AND LEGAL PRACTICE -- The student will be able to:

06.01 Perform according to acceptable standards of professional ethics.
06.02 Comply with agency's policies.
06.03 Respect the confidences imparted in the course of professional activities.
06.04 Practice under the direction of a physical therapist.
06.05 Familiarize self with agency's emergency procedures and equipment.
06.06 Describe techniques of CPR and basic first aid.
06.07 Record treatments/results in appropriate places.
06.08 Recognize and report symptoms of abuse and neglect.
06.09 Describe scope of practice for physical therapist aide and

recognize legal implications for acting beyond this.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

07.01 Conduct a job search.
07.02 Secure information about a job.
07.03 Identify documents that may be required when applying for a job.
07.04 Complete a job application.
07.05 Demonstrate competence in job interview techniques.
07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
07.07 Identify acceptable work habits.
07.08 Demonstrate knowledge of how to make a job change appropriately.
07.09 Demonstrate acceptable employee health habits.

08.0 RECOGNIZE THE ROLE OF THE PHYSICAL THERAPIST AIDE -- The student will be able to:

08.01 Recognize own feelings of self worth and the dignity of work.
08.02 Recognize the helping relationship to therapist, physician, etc. by interpreting the organizational chart.
08.03 Prepare areas for treatment.
08.04 Transport patient into area and place in appropriate area.
08.05 Recognize importance of own appearance as well as that of therapy department.
08.06 Maintain the environment in a hydrotherapy room.
08.07 Perform housekeeping and maintenance functions.

09.0 RESPOND TO PATIENT'S NEEDS AS REFLECTED IN THE PATIENT'S BILL OF RIGHTS -- The student will be able to:

09.01 Demonstrate awareness of patient's need for dignity and the ability to function as an independent being in society.
09.02 Recognize patient expressions of pain, spoken or unspoken (body language).
09.03 Recognize patient's need to prevent deformity.
09.04 Recognize patient's need for improving muscle strength, improving systematic functioning and maximizing remaining abilities.
09.05 Deal effectively with patient's emotional responses.

10.0 ASSIST IN PREPARING HOT OR COLD TREATMENTS -- The student will be able to:

10.01 Read a variety of thermometers, Fahrenheit and centigrade (Celsius) with an assortment of shapes and constructions.
10.02 State normal body temperatures and measure an oral or axillary temperatures.
10.03 Take the temperature of liquids, oils, solids.
10.04 State the therapeutic temperature range for modalities in which temperature is a guideline for application.

11.0 PERFORM ROUTINE MAINTENANCE OF EQUIPMENT -- The student will be able to:

11.01 Recognize importance of routine maintenance.
11.02 Clean and check operation of wheelchairs, stretchers, treatment tables, etc.
11.03 Perform routine maintenance on machines according to manufacturer's specifications.

12.0 DISINFECT AND STERILIZE MATERIALS AND EQUIPMENT -- The student will be able to:

12.01 Disinfect used equipment.
12.02 Prepare materials for sterilization.
12.03 Define disinfect, sterilize, germicide, vaccinate, immunize,

antiseptic, septic.

13.0 APPLY ACCEPTED PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

13.01 Distinguish fact from fallacy regarding the transmission and treatment of immune-deficiency diseases.
13.02 Identify community resources and services available to the victims of immune-deficiency diseases.
13.03 Identify at-risk behaviors which promote the spread of AIDS and the public education needed to combat the spread of immune-deficiency diseases.
13.04 Apply infection control techniques according to the Center for Disease Control (CDC) guidelines.
13.05 Discuss the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Physical Therapist Assistant

CODE NUMBER: Secondary _____ Postsecondary _____

Florida CIP 0317.081500

SECONDARY SCHOOL CREDITS _______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other _____

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as physical therapist assistants (66017443), (076.224-010) or to provide supplemental training for persons previously or currently employed in these occupations.

The program should meet the requirements of the Commission on Accreditation in Physical Therapy Education/American Physical Therapy Association. The graduate is prepared to write the Florida Physical Therapist Assistant licensing examination (Chapter 486, Physical Therapy Practice) which is given by the Florida Department of Professional Regulation, Florida Board of Physical Therapy.

Reinforcement of basic skills in English, mathematics and science occurs through classroom instruction, laboratory and clinical procedures.

II. LABORATORY ACTIVITIES: Theory of physical therapy procedures is presented prior to practical application. An instructional mode of demonstration/return demonstration is appropriate. In a simulated patient setting, students administer/apply or instruct in physical therapy techniques and physical agents.

Laboratory work is structured so that students begin with basic patient care skills, progress to basic physical therapy skills and then to more advanced physical therapy application and techniques.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The cooperative method of instruction is not appropriate for this program.

The appropriate degree for this program is the associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Transport patients.
05. Describe anatomical structure, function and dysfunction of the human body related to the practice of physical therapy.
06. Assist the physical therapist with various treatments/procedures.

07. Demonstrate safe, ethical and legal practice.
08. Respond to patient's needs as reflected in the Patient's Bill of Rights.
09. Demonstrate safe administration of all physical agents.
10. Demonstrate use of exercise, assistive/supportive devices and specialized equipment.
11. Perform routine maintenance of equipment.
12. Disinfect and sterilize materials and equipment.
13. Respond to acute changes in physiological state.
14. Teach other health care providers, patients and families to perform selected treatment procedures and functional activities.
15. Identify architectural barriers.
16. Interact with patients and families in a manner which provides desired psycho-social support.
17. Define scope of practice.
18. Describe basic concepts related to the health care system including multidisciplinary team approach, quality care, governmental agencies, private sector, role of other health care providers, health care facilities, issues and problems.
19. Identify basic principles of levels of authority and responsibility, planning, time management, supervisory process, performance evaluations and fiscal consideration (provider and consumer).
20. Demonstrate employability skills.
21. Apply accepted principles of infection control.

STUDENT PERFORMANCE STANDARDS — EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations — SECONDARY NUMBER: ________

PROGRAM TITLE: Physical Therapist Assistant — POSTSECONDARY NUMBER: 0317.081500

01.0 USE VERBAL AND WRITTEN COMMUNICATION -- The student will be able to:

01.01 Define unfamiliar medical terms by use of structural analysis, decoding, contextual clues or by using a medical dictionary.
01.02 Distinguish between factual reports and personal opinion.
01.03 Report observations in written and oral form.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, analyze and report on graphs, charts and tables.
02.02 Measure time, temperature, distance, capacity and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and judge the reasonableness of the result.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Evaluate and draw conclusions.

04.0 TRANSPORT PATIENT -- The student will be able to:

04.01 Follow safety practices when transporting patient.
04.02 Move patient from bed to wheelchair.
04.03 Move patient from bed to stretcher with assistance.
04.05 Transport patients through hallways, doors, elevators, etc.

05.0 DESCRIBE ANATOMICAL STRUCTURE, FUNCTION AND DYSFUNCTION OF THE HUMAN BODY RELATED TO THE PRACTICE OF PHYSICAL THERAPY -- The student will be able to:

05.01 Describe normal and abnormal motor behavior.
05.02 Describe orthopedic disabilities and related treatment.
05.03 Describe neurological disabilities and related treatment.
05.04 Describe medical/surgical conditions related to physical therapy care.
05.05 Assist physical therapist in evaluation and assessment of disabilities and conditions.

06.0 ASSIST THE PHYSICAL THERAPIST WITH VARIOUS TREATMENTS/PROCEDURES -- The student will be able to:

06.01 Prepare patients, treatment areas and equipment.
06.02 Recognize gait deviations.
06.03 Perform gait training techniques.
06.04 Assist therapist to administer activities of daily living training to clients.
06.05 Assist therapist with application of external bandages, dressings and support devices.
06.06 Implement therapeutic exercises as demonstrated by the therapist.
06.07 Measure for and fit assistive devices.
06.08 Assist in selected evaluation and assessment procedures.
06.09 Perform therapeutic massage.

07.0 DEMONSTRATE SAFE, ETHICAL AND LEGAL PRACTICE -- The student will be able to:

07.01 Perform according to acceptable standards of professional ethics.
07.02 Comply with agency's policies and procedures.
07.03 Respect the confidences imparted in the course of professional activities.
07.04 Practice under the direction of a physical therapist.
07.05 Recognize agency's emergency procedures and equipment.
07.06 Cite indications and contradictions for each treatment/procedure.
07.07 Record treatment/results in progress notes using correct format, content and terminology.
07.08 Read and draw pertinent information from patient charts.
07.09 Observe safety precautions when treating patients.
07.10 Recognize and report symptoms of patient abuse and neglect.
07.11 Recognize and support the ethical utilization of supportive personnel.
07.12 Describe the techniques of CPR and first aid.
07.13 Perform isolation techniques related to patient care.

08.0 RESPOND TO PATIENT'S NEEDS AS REFLECTED IN THE PATIENT'S BILL OF RIGHTS -- The student will be able to:

08.01 Demonstrate awareness of the patient's need for dignity and independence.
08.02 Recognize patient expressions of discomfort, spoken or unspoken (body language).
08.03 Deal effectively with patient's emotional responses.

09.0 DEMONSTRATE SAFE ADMINISTRATION OF ALL PHYSICAL AGENTS -- The student will be able to:

09.01 Read a variety of thermometers, Fahrenheit or centigrade (Celsius).
09.02 State normal body temperature and measure an oral or axillary temperature.
09.03 Measure the temperature of liquids, oils, solids.
09.04 State the therapeutic temperature range for modalities in which temperature is a guideline for application.
09.05 Identify physiological effects of heat vs. cold applications.
09.06 Administer therapeutic ultrasound.
09.07 Describe therapeutic use of ultra-violet light.

09.08 Demonstrate therapeutic use of physical agents such as water, heat, cold and electricity.

10.0 DEMONSTRATE USE OF EXERCISE, ASSISTIVE/SUPPORTIVE DEVICES AND SPECIALIZED EQUIPMENT -- The student will be able to:

10.01 State the benefits of exercise.
10.02 Define orthotics and state the importance of proper fit.
10.03 Perform crutch walking, stair climbing, use of wheelchair.
10.04 Describe differences in wheelchairs.
10.05 Discuss upper and lower extremity prosthetics in terms of types of amputations and prosthetics.
10.06 Identify common problems in prosthetic management and apply managerial skills in dealing effectively with them.
10.07 Recognize and assist in exercise techniques used in physical therapy.
10.08 Perform postural drainage and instruct patient in proper coughing and breathing exercises.
10.09 Apply mechanical traction.
10.10 Apply intermittent venous compression.
10.11 Perform goniometric measurement.
10.12 Assist patient in use of orthotic/prosthetic devices.

11.0 PERFORM ROUTINE MAINTENANCE OF EQUIPMENT
-- The student will be able to:

11.01 Recognize the importance of routine maintenance.
11.02 Clean and check operation of wheelchairs, stretchers, treatment tables, etc.

12.0 DISINFECT AND STERILIZE MATERIALS AND EQUIPMENT
-- The student will be able to:

12.01 Define disinfect, sterilize, germicide, vaccinate, immunize, antiseptic, septic.
12.02 Disinfect used equipment.
12.03 Prepare materials for sterilization.

13.0 RESPOND TO ACUTE CHANGES IN PHYSIOLOGICAL STATE
-- The student will be able to:

13.01 Determine baseline physiological state.
13.02 Recognize change in baseline physiological state.
13.03 Determine significance of change in physiological state.
13.04 Apply guidelines in the assessment of blood pressure, pulse, respiration, sweating,skin color, mental alertness, skin temp, pupil size and pupil reaction.

14.0 TEACH OTHER HEALTH CARE PROVIDERS, PATIENTS AND FAMILIES TO PERFORM SELECTED TREATMENT PROCEDURES AND FUNCTIONAL ACTIVITIES
-- The student will be able to:

14.01 Detail equipment or treatment preparation methods.
14.02 Instruct in safety rules for equipment or treatment.
14.03 Utilize proper teaching techniques relative to level of individual's understanding.
14.04 Describe desired outcomes of the selected treatment procedure or functional activity.
14.05 Use appropriate medical terminology.

15.0 IDENTIFY ARCHITECTURAL BARRIERS -- The student will be able to:

15.01 Identify which environmental factors are potential architectural barriers.
15.02 Determine which aspects of the patient's functional level and ambulatory/mobility equipment are germane to architectural problems.
15.03 Describe action required to remediate barriers.

16.0 INTERACT WITH PATIENTS AND FAMILIES IN A MANNER WHICH PROVIDES THE DESIRED PSYCHO-SOCIAL SUPPORT -- The student will be able to:

16.01 Recognize own reaction to the patient's illness or disability.
16.02 Recognize patient's and family's reactions to illness and disability.
16.03 Respect individual, cultural, religious and socio-economic differences in people.
16.04 Utilize appropriate communicative processes.

17.0 DEFINE SCOPE OF PRACTICE -- The student will be able to:

17.01 Demonstrate awareness of his/her own role.
17.02 Identify scope of responsibility as it relates to patient care, departmental function, physical therapist and physical therapist aide.

18.0 DESCRIBE BASIC CONCEPTS RELATED TO THE HEALTH CARE SYSTEM INCLUDING MULTI-DISCIPLINARY TEAM APPROACH, QUALITY CARE, GOVERNMENTAL AGENCIES, PRIVATE SECTOR, ROLE OF OTHER HEALTH CARE PROVIDERS, HEALTH CARE FACILITIES,ISSUES AND PROBLEMS -- The student will be able to:

18.01 Describe disciplines within medical care arena and the roles served.
18.02 Describe the categories of health care agencies.
18.03 Recognize current issues and problems affecting the delivery of health care.

19.0 IDENTIFY BASIC PRINCIPLES OF LEVELS OF AUTHORITY AND RESPONSIBILITY, PLANNING, TIME MANAGEMENT, SUPERVISORY PROCESS, PERFORMANCE EVALUATIONS AND FISCAL CONSIDERATION (PROVIDER AND CONSUMER) -- The student will be able to:

19.01 Organize time effectively.
19.02 Communicate information to correct individual understanding the proper chain of command.
19.03 Prepare daily work schedule for effective, efficient delivery of care.
19.04 Utilize resources efficiently and conservatively in the delivery of health care.

20.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

20.01 Conduct a job search.
20.02 Secure information about a job.
20.03 Identify documents required when applying for a job.
20.04 Complete a resume and job application form.
20.05 Demonstrate competence in job interview techniques.
20.06 Identify or demonstrate acceptable responses to criticism from employer, supervisor or other persons.
20.07 Identify acceptable work habits.
20.08 Discuss acceptable means of changing jobs.
20.09 Demonstrate acceptable employee health habits.

21.0 APPLY ACCEPTED PRINCIPLES OF INFECTION CONTROL -- The student will be able to:

21.01 Distinguish fact from fallacy regarding the transmission and treatment of immune-deficiency diseases.
21.02 Identify community resources and services available to the victims of immune-deficiency diseases.
21.03 Identify at-risk behaviors which promote the spread of AIDS and the public education needed to combat the spread of immune-deficiency diseases.
21.04 Apply infection control techniques according to the Center for Disease Control (CDC) guidelines.
21.05 Discuss the legal aspects of AIDS.

CURRICULUM FRAMEWORK   PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION   EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Practical Nursing

CODE NUMBER: Secondary 8418300   Postsecondary H170605

Florida CIP 0317.060500

SECONDARY
SCHOOL CREDITS 8   COLLEGE CREDITS ______   POSTSECONDARY ADULT
VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): _____ 7-9 ____ 9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 10-12, 30, 31

CERTIFICATION COVERAGE: NURSE ED @5   PRAC NURSE @7 G

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as licensed practical nurses (32505216) or to provide supplemental training for a person previously or currently employed in this occupation. The program must be approved by the Florida State Board of Nursing so the graduate may take the examination to practice as a Licensed Practical Nurse.

The content includes, but is not limited to, theoretical instruction and clinical experience in medical, surgical, obstetric, pediatric, and geriatric nursing; theoretical instruction and clinical experience in both acute and long term care situations; theoretical instruction and clinical application of vocational role and function; personal, family and community health concepts; nutrition; human growth and development over the life span; body structure and function; interpersonal relationship skills, mental health concepts; pharmacology and administration of medications; legal aspects of practice; CPR and Basic Life Support (BLS) and current issues in nursing. Clinical experience should make up at least 50% of the total program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that this program comprises when offered at the secondary level:

8418310	Practical Nursing 1
8418320	Practical Nursing 2
8418330	Practical Nursing 3
8418340	Practical Nursing 4
8418350	Practical Nursing 5
8418360	Practical Nursing 6
8418370	Practical Nursing 7
8418380	Practical Nursing 8

II. **LABORATORY ACTIVITIES**: Simulated practice and clinical experiences are included as an integral part of this program.

Clinical Experience Rules:

(1) Each student providing direct care to patients/clients in a health care agency shall be under the supervision of a faculty member. Faculty should be responsible for supervising students on no more than two units during one clinical instruction period.

(2) No more than twelve students shall be assigned to a faculty member

for supervision in providing direct care to patients/clients for any one clinical instruction period.

(3) Faculty shall be physically present within the health care agency while students are engaged in providing direct care to patients/clients.

(4) Faculty shall be immediately available by telephone to students engaged in an observational experience or assigned to family-community health experiences.

(5) Clinical facilities utilized for clinical training by students of approved programs shall provide evidence satisfactory to the Board that they meet the following requirements:

(a) Current state licensure certification.
(b) The director of nurses or person responsible for nursing services is a registered nurse currently licensed in Florida.
(c) The number and variety of patients are sufficient to meet clinical learning objectives of the nursing program.
(d) There is nursing personnel, sufficient in number currently licensed and appropriately qualified, to ensure that patients receive safe and effective care at all times.
(e) There are written job descriptions for all categories of nursing personnel which are used as a basis for assigning responsibilities.
(f) Appropriate references and current practice and procedure manuals are available on the unit where students receive experience.

(6) Nursing programs shall seek prior approval from the Board for any clinical facility utilized for student clinical instruction.

(7) It shall be the responsibility of the nursing program to obtain and maintain current contractual agreements with each agency utilized for student clinical training to ensure that the nursing program can provide the appropriate clinical experiences necessary to fulfill the requirements of these rules; and

(8) When more than one nursing program is using an agency for student clinical experience, there shall be written documentation of cooperative planning among the programs and the agency.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization as well as participation in a career related professional organization(s) for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Students must take a state licensing examination. Minimal acceptable performance for each graduating class on the licensing examination shall be determined by the Board. Board requirements shall not exceed the national average as published by the testing service of the National Council of State Boards of Nursing, Inc.

Program must comply with the State Board of Nursing rules, including faculty qualifications, number of students admitted, length of courses, etc. There may be no deviations from an approved plan of instruction without Board of Nursing approval.

The person responsible for the day to day implementing of the classroom and clinical duties shall be given time apart from classroom and clinical responsibilities sufficient to meet the administrative needs of the program.

Students who have successfully completed the program HO17.060200, Nursing Assisting, should be given appropriate recognition, such as advanced standing for demonstrating those competencies.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 1300 hours.

A student who completes this program may substitute two required science credits in accordance with the Pupil Progression Plan. Students completing this program with a 3.5 GPA will be eligible for the Gold Seal Endorsement.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Use verbal and written communication.
02. Apply basic math skills.
03. Apply basic science skills.
04. Demonstrate legal and ethical responsibilities.
05. Describe human growth and development.
06. Provide emergency care.
07. Perform aseptic techniques.
08. Describe the anatomy and physiology of the human body.
09. Perform physical comfort and safety functions.
10. Provide personal patient care.
11. Perform nursing procedures.
12. Administer medication.
13. Apply principles of nutrition.
14. Provide care for medical/surgical patients, utilizing the nursing process.
15. Provide care for maternal/newborn patients, utilizing the nursing process.
16. Provide care for pediatric patients, utilizing the nursing process.
17. Provide care for geriatric patients, utilizing the nursing process.
18. Apply the principles of infection control, utilizing the nursing process.
19. Provide care for pre-operative and post-operative patients, utilizing the nursing process.
20. Provide bio-psycho-social support.
21. Perform supervised management functions.
22. Assist with rehabilitative activities.
23. Demonstrate employability skills.
24. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1994

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Practical Nursing POSTSECONDARY NUMBER: PRN0400

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

01.01 Identify and use various forms of communication.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Receive and give oral report of patient's status.
01.06 Report and record objective, pertinent observations.
01.07 Maintain current documentation.
01.08 Document changes in patient behavior and mental awareness.
01.09 Obtain specified data from patient and family.
01.10 Define and explain the steps in the nursing process.
01.11 Utilize the nursing process to assist with the patient's plan of care.
01.12 Demonstrate basic computer skills.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, and report on graphs, charts and tables.
02.02 Student will measure time, temperature, distance, capacity, and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and approximations and judge the reasonableness of the result.
02.05 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Demonstrate ability to evaluate and draw conclusions.
03.02 Demonstrate knowledge of anatomy and physiology of body systems.
03.03 Apply the principles of medical/surgical asepsis.
03.04 Organize and communicate the results obtained by observation and experimentation.

04.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

04.01 Identify the components of the Nurse Practice Act.
04.02 Practice within the role and scope of the job description.
04.03 Identify the role of each health care team member.
04.04 Explain the patient's "Bill of Rights".
04.05 Maintain confidentiality of patient information.
04.06 Describe the purpose of the chain of command (e.g. to resolve patient or employee problems).
04.07 Follow policies and procedures affecting the health, safety, and well-being of patients.
04.08 Recognize and report signs and symptoms of abuse and neglect.
04.09 Recognize and report signs of substance abuse.
04.10 Follow legal guidelines in charting.

05.0 DESCRIBE HUMAN GROWTH AND DEVELOPMENT -- The student will be able to:

05.01 Describe characteristics of growth and development from conception to birth.
05.02 Describe characteristics of growth and development from birth through preschool.
05.03 Describe characteristics of growth and development from school age through adolescence.
05.04 Describe characteristics of growth and development of the adult through the life span.

06.0 PROVIDE EMERGENCY CARE -- The student will be able to:

06.01 Perform emergency measures, including CPR.
06.02 Identify emergency evacuation procedures.

07.0 PERFORM ASEPTIC TECHNIQUES -- The student will be able to:

07.01 Wash hands.
07.02 Apply and remove sterile gloves and gown.
07.03 Apply sterile dressing.
07.04 Open sterile equipment and supplies.
07.05 Maintain sterile field.
07.06 Clean and disinfect instruments and equipment.

08.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY -- The student will be able to:

08.01 Describe the basic structure and function of body systems.
08.02 Describe the relationships of body systems in providing patient care.
08.03 Describe the structure and function of the respiratory system.
08.04 Describe the structure and function of the cardio-vascular system.
08.05 Describe the structure and function of the muscular-skeletal system.
08.06 Describe the structure and function of the nervous, skin, and sensory systems.
08.07 Describe the structure and function of the reproductive system.
08.08 Describe the structure and function of the urinary system.
08.09 Describe the structure and function of the digestive system.
08.10 Describe the structure and function of the endocrine system.

09.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS -- The student will be able to:

09.01 Care for equipment and supplies.
09.02 Maintain patient units.
09.03 Maintain service areas on the units.
09.04 Observe and report patient's daily behavior.
09.05 Observe and report patient's mental awareness.
09.06 Adjust bed and siderails.
09.07 Lift, hold, or transfer a patient using good body mechanics.
09.08 Transfer patient from bed to wheelchair using mechanical lifters.
09.09 Transfer patient to stretcher.
09.10 Turn and position patient.
09.11 Apply protective devices as directed (e.g. vest, belt, wrist, and ankle mitt).
09.12 Apply comfort devices as directed (e.g. footboard, overbed cradle, sandbag, alternating pressure mattress).
09.13 Assist patient to dangle.
09.14 Assist patient to walk.
09.15 Assist patient in crutch-walking.
09.16 Assist patient in using cane.
09.17 Assist patient in using walker.
09.18 Assist patient in using wheelchair.

10.0 PROVIDE PERSONAL PATIENT CARE -- The student will be able to:

10.01 Give bed bath.
10.02 Assist with tub bath or shower.
10.03 Give shampoo.
10.04 Shave patient.
10.05 Provide skin care.
10.06 Provide foot care.
10.07 Groom hair.
10.08 Groom nails.

10.09 Assist with oral hygiene.
10.10 Give denture care.
10.11 Administer oral hygiene to an unconscious patient.
10.12 Assist with using bedside commode.
10.13 Assist with using bedpan.
10.14 Assist with using urinal.
10.15 Assist patient to dress.
10.16 Assist with meals.

11.0 PERFORM NURSING PROCEDURES -- The student will be able to:

11.01 Admit patient
11.02 Assist the RN with patient assessments.
11.03 Transfer patient.
11.04 Discharge patient.
11.05 Make unoccupied/occupied bed.
11.06 Make surgical bed.
11.07 Take and record patient's pulse and respiration.
11.08 Take and record patient's blood pressure.
11.09 Take and record patient's temperature.
11.10 Take and record patient's height and weight.
11.11 Assist patient in passive range of motion exercises.
11.12 Apply anti-embolic hose.
11.13 Collect routine urine specimen.
11.14 Strain urine.
11.15 Collect and test urine for sugar and acetone.
11.16 Collect timed urine specimen.
11.17 Monitor catheter drainage system.
11.18 Collect clean-catch (midstream voided) urine specimen.
11.19 Monitor fluid intake and output (I&O).
11.20 Observe, record, and report patient's emesis.
11.21 Apply hot and cold applications.
11.22 Assist patient with sitz bath.
11.23 Monitor and assist with care of catheters.
11.24 Apply pelvic belt for traction.
11.25 Apply cervical collar.
11.26 Monitor chest drainage system.
11.27 Monitor patient's following special procedures (e.g. I.V.P., myelogram, MRI, CAT scan).
11.28 Apply bandage.
11.29 Apply binders.
11.30 Apply brace.
11.31 Apply splints.
11.32 Care for patient in skin and skeletal traction.
11.33 Clean tong/pin site.
11.34 Change clean dressing.
11.35 Insert urinary catheter.
11.36 Obtain specimen from patient with indwelling catheter.
11.37 Measure urine specific gravity.
11.38 Remove retention catheter.
11.39 Change ostomy appliance.
11.40 Connect nasogastric tube to suction machine.
11.41 Remove nasogastric tube.
11.42 Administer gavage feeding.
11.43 Perform neurological checks.
11.44 Give enema.
11.45 Logroll patient.
11.46 Collect stool specimen.
11.47 Collect sputum specimen.
11.48 Test stool for occult blood.
11.49 Perform naso-oral-pharyngeal suction.
11.50 Perform tracheostomy care.
11.51 Irrigate urinary catheter.
11.52 Monitor continuous urinary bladder irrigation.
11.53 Irrigate ear.
11.54 Irrigate eye.
11.55 Irrigate nasogastric tube.

11.56 Irrigate vaginal canal.
11.57 Irrigate wound.
11.58 Irrigate oral cavity.
11.59 Irrigate colostomy.
11.60 Collect gastric analysis specimen.
11.61 Instruct patient in breathing exercises.
11.62 Obtain and test a drop of blood for sugar.
11.63 Assist with physical examination.
11.64 Assist patient with diagnostic procedures.
11.65 Set up vaporizer/humidifier.
11.66 Administer and maintain oxygen.
11.67 Perform calculation and adjust IV flow rate.
11.68 Observe intravenous infusion and report signs of adverse reactions.
11.69 Inspect insertion site, change dressing, and remove IV needle or catheter from peripheral veins.
11.70 Assist with postmortem care.

12.0 ADMINISTER MEDICATION -- The student will be able to:

12.01 Demonstrate the five rights of administering medication.
12.02 Observe and respond to patient's need for medication.
12.03 Administer topical medication.
12.04 Administer inhalants.
12.05 Administer oral medication.
12.06 Administer sublingual medication.
12.07 Administer rectal medication.
12.08 Administer vaginal medication.
12.09 Administer eye medications.
12.10 Administer ear drops.
12.11 Administer nose drops.
12.12 Administer intramuscular injection (including Z-tract).
12.13 Administer intradermal injection.
12.14 Administer subcutaneous injection.
12.15 Monitor and document use of controlled substances.
12.16 Instill bladder medication.
12.17 Care for equipment and supplies used to administer medications.
12.18 Instruct patient regarding self-administration of medications.
12.19 Observe and communicate effects of medications.
12.20 Document administration of medication and patient's response on medical record.
12.21 Store medications properly.
12.22 Assist patient with taking self-administered prescribed medication in the home.

13.0 APPLY PRINCIPLES OF NUTRITION -- The student will be able to:

13.01 Identify nutrients and food groups.
13.02 Explain regional, cultural, and religious food patterns.
13.03 Describe special diets.
13.04 List factors which must be considered when purchasing food.
13.05 Prepare a basic food plan.
13.06 List factors which must be considered when storing food.
13.07 Identify methods of food preparation.

14.0 PROVIDE CARE FOR MEDICAL/SURGICAL PATIENTS UTILIZING THE NURSING PROCESS -- The student will be able to:

14.01 Identify signs and symptoms of disease/disorders of the body systems.
14.02 Identify diagnostic tests used in the treatment of diseases/disorders of the body systems.
14.03 Identify medications used in the treatment of diseases/disorders of the body systems.
14.04 Identify nutritional needs of patients with diseases/disorders of the body systems.

14.05 Identify common alterations in patients with psychological disorders.
14.06 Care for the patient with respiratory disease/disorder.
14.07 Care for the patient with cardio-vascular disease/disorder.
14.08 Care for the patient with muscular-skeletal disease/disorder.
14.09 Care for the patient with nervous, skin, and sensory disease/disorder.
14.10 Care for the patient with reproductive disease/disorder.
14.11 Care for the patient with urinary disease/disorder.
14.12 Care for the patient with digestive disease/disorder.
14.13 Care for the patient with endocrine disease/disorder.

15.0 CARE FOR MATERNAL/NEWBORN PATIENT UTILIZING THE NURSING PROCESS

-- The student will be able to:

15.01 Describe prenatal care.
15.02 Admit patient to labor and delivery
15.03 Monitor contractions.
15.04 Monitor fetal heart rate.
15.05 Recognize signs of fetal distress.
15.06 Prepare patient for Caesarean.
15.07 Describe care during delivery process.
15.08 Describe Apgar score.
15.09 Suction infant's respiratory passage with bulb syringe.
15.10 Identify infant using mother's bracelet.
15.11 Weigh and measure infant.
15.12 Bathe infant.
15.13 Carry infant.
15.14 Feed infant.
15.15 Collect urine specimen from infant.
15.16 Provide post-partum care.
15.17 Perform perineal care.
15.18 Provide breast care.
15.19 Instruct mother in infant care.
15.20 Assist with circumcision.
15.21 Apply dressing to circumcision site.
15.22 Clean infant genitalia and diaper.
15.23 Discharge obstetric patient.

16.0 PROVIDE CARE FOR PEDIATRIC PATIENTS UTILIZING THE NURSING PROCESS

-- The student will be able to:

16.01 Adapt nursing care for the pediatric patient.
16.02 Apply safety principles for the pediatric patient.
16.03 Describe general characteristics, particular needs, and problems of pediatric patients.
16.04 Prepare patient and family for the hospital experience.
16.05 Identify signs and symptoms of common disorders/diseases.
16.06 Implement prescribed nutritional requirement.
16.07 Provide diversion and recreational activities.

17.0 PROVIDE CARE FOR GERIATRIC PATIENTS UTILIZING THE NURSING PROCESS

-- The student will be able to:

17.01 Identify safety principles as related to the elderly.
17.02 Adapt safety principles as related to the elderly.
17.03 Describe general characteristics, particular needs, and problems of the elderly.
17.04 Identify attitudes and living habits which promote positive mental and physical health for the elderly.
17.05 Distinguish between fact and fallacy about the aging process.
17.06 Identify signs and symptoms of common disorders/diseases.
17.07 Identify community resources and services available to the elderly.
17.08 Apply Reality Orientation Techniques.
17.09 Provide and involve patients in diversional activities.
17.10 Identify common alterations in elderly patient behavior.

17.11 Provide care for patients with special needs (e.g. impaired hearing, impaired vision, immobility, impaired body functions).

18.0 APPLY THE PRINCIPLES OF INFECTION CONTROL UTILIZING THE NURSING PROCESS -- The student will be able to:

18.01 Provide care for patients with infectious diseases.
18.02 Identify at risk behavior which promotes the spread of AIDS.
18.03 Practice Universal Precautions according to Centers for Disease Control guidelines.
18.04 Set up isolation unit.
18.05 Serve isolation food tray.
18.06 Put on and remove isolation garments.
18.07 Collect specimen from isolated patient.
18.08 Remove materials from isolation unit.

19.0 PROVIDE CARE FOR PRE-OPERATIVE AND POST-OPERATIVE PATIENTS UTILIZING THE NURSING PROCESS -- The student will be able to:

19.01 Provide pre-operative teaching.
19.02 Shave and prep patient.
19.03 Prepare patient for operating room.
19.04 Prepare patient's medical records for operating room.
19.05 Provide post-operative care.

20.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT -- The student will be able to:

20.01 Identify basic human needs.
20.02 Discuss family roles and their significance to health.
20.03 List community resources for individual and family health.
20.04 Identify components of the grief process.
20.05 Respond to emotional needs of patient and family.

21.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS -- The student will be able to:

21.01 Organize patient care assignments.
21.02 Complete assignments accurately and in a timely manner.
21.03 Complete requisitions.

22.0 ASSIST WITH REHABILITATIVE ACTIVITIES -- The student will be able to:

22.01 List the purposes of rehabilitation program.
22.02 Assist patient with specified rehabilitation needs.
22.03 Assist patients to reach optimum level of independence.

23.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

23.01 Conduct a job search.
23.02 Secure information about a job.
23.03 Identify documents that may be required when applying for a job.
23.04 Complete a job application.
23.05 Demonstrate competence in job interview techniques.
23.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
23.07 Identify acceptable work habits.
23.08 Demonstrate knowledge of how to make job changes appropriately.
23.09 Demonstrate acceptable employee health habits.

24.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

24.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
24.02 Identify community resources and services available to the victims of immune-deficiency diseases.
24.03 Identify at risk behaviors which promote the spread of AIDS and

the public education necessary to combat the spread of immune-deficiency diseases.

24.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of _all_ patients following Centers for Disease Control (CDC) guidelines.

24.05 Demonstrate knowledge of the legal aspects of AIDS.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations
COURSE CREDIT: 1
PROGRAM TITLE: Practical Nursing
PROGRAM NUMBER: 8418300
COURSE TITLE: Practical Nursing 1
COURSE NUMBER: __________

COURSE DESCRIPTION:

This course covers the basic knowledge in nursing theory and practice and includes basic communication skills; math and science applications as it relates to nursing, legal and ethical responsibilities, human growth and development and principles of infection control.

The clinical experiences provide the student with the opportunity to apply the basic principles of theory and nursing practice and to practice basic nursing skills.

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS -- The student will be able to:

01.01 Identify and use various forms of communication.
01.02 Identify barriers to communication.
01.03 use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Receive and give oral report of patient's status.
01.06 Report and record objective, pertinent observations.
01.07 Maintain current documentation.
01.08 Document changes in patient behavior and mental awareness.
01.09 Obtain specified data from patient and family.
01.10 Define and explain the steps in the nursing process.
01.11 Utilize the nursing process to assist with the patient's plan of care.
01.12 Demonstrate basic computer skills.

02.0 APPLY BASIC MATH SKILLS -- The student will be able to:

02.01 Draw, read, and report on graphs, charts and tables.
02.02 Student will measure time, temperature, distance, capacity, and mass/weight.
02.03 Make and use measurements in both traditional and metric units.
02.04 Make estimates and approximations and judge the reasonableness of the result.
02.05 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS -- The student will be able to:

03.01 Demonstrate ability to evaluate and draw conclusions.
03.02 Demonstrate knowledge of anatomy and physiology of body systems.
03.03 Apply the principles of medical/surgical asepsis.
03.04 Organize and communicate the results obtained by observation and experimentation.

04.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

04.01 Identify the components of the Nurse Practice Act.
04.02 Practice within the role and scope of the job description.
04.03 Identify the role of each health care team member.
04.04 Explain the patient's "Bill of Rights".
04.05 Maintain confidentiality of patient information.
04.06 Describe the purpose of the chain of command (e.g. to resolve patient or employee problems).
04.07 Follow policies and procedures affecting the health, safety, and well-being of patients.
04.08 Recognize and report signs and symptoms of abuse and neglect.
04.09 Recognize and report signs of substance abuse.

04.10 Follow legal guidelines in charting.

05.0 DESCRIBE HUMAN GROWTH AND DEVELOPMENT -- The student will be able to:

05.01 Describe characteristics of growth and development from conception to birth.
05.02 Describe characteristics of growth and development from birth through preschool.
05.03 Describe characteristics of growth and development from school age through adolescence.
05.04 Describe characteristics of growth and development of the adult through the life span.

18.0 APPLY THE PRINCIPLES OF INFECTION CONTROL UTILIZING THE NURSING PROCESS -- The student will be able to:

18.01 Provide care for patients with infectious diseases.
18.02 Identify "at risk" behavior which promotes the spread of AIDS.
18.03 Practice Universal Precautions according to Centers for Disease Control guidelines.
18.04 Set up isolation unit.
18.05 Serve isolation food tray.
18.06 Put on and remove isolation garments.
18.07 Collect specimen from isolated patient.
18.08 Remove materials from isolation unit.

24.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

24.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
24.02 Identify community resources and services available to the victims of immune-deficiency diseases.
24.02 Identify community resources and services available to the victims of immune-deficiency diseases.
24.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
24.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
24.05 Demonstrate knowledge of the legal aspects of AIDS.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations
COURSE CREDIT: 1
PROGRAM TITLE: Practical Nursing
PROGRAM NUMBER: 8418300
COURSE TITLE: Practical Nursing 2
COURSE NUMBER: ________

COURSE DESCRIPTION: This course is a continuation of Practical Nursing 1 and covers the basic knowledge in nursing theory and practice. It includes basic nursing skills, principles of safety, normal body structure and function, and personal and vocational adjustments.

Laboratory and clinical experiences are an integral part of this course.

06.0 PROVIDE EMERGENCY CARE -- The student will be able to:

06.01 Performs emergency measures, including CPR.
06.02 Identify emergency evacuation procedures.

07.0 PERFORM ASEPTIC TECHNIQUES -- The student will be able to:

07.01 Wash hands.
07.02 Apply and remove sterile gloves and gown.
07.03 Apply sterile dressing.
07.04 Open sterile equipment and supplies.
07.05 Maintain sterile field.
07.06 Clean and disinfect instruments and equipment.

08.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY -- The student will be able to:

08.01 Describe the basic structure and function of body systems.
08.02 Describe the relationships of body systems in providing patient care.
08.03 Describe the structure and function of the respiratory system.
08.04 Describe the structure and function of the cardio-vascular system.
08.05 Describe the structure and function of the muscular-skeletal system.
08.06 Describe the structure and function of the nervous, skin, and sensory systems.
08.07 Describe the structure and function of the reproductive system.
08.08 Describe the structure and function of the urinary system.
08.09 Describe the structure and function of the digestive system.
08.10 Describe the structure and function of the endocrine system.

09.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS -- The student will be able to:

09.01 Care for equipment and supplies.
09.02 Maintain patient units.
09.03 Maintain service areas on the units.
09.04 Observe and report patient's daily behavior.
09.05 Observe and report patient's mental awareness.
09.06 Adjust bed and siderails.
09.07 Lift, hold, or transfer a patient using good body mechanics.
09.08 Transfer patient from bed to wheelchair using mechanical lifters.
09.09 Transfer patient to stretcher.
09.10 Turn and position patient.
09.11 Apply protective devices as directed (e.g. vest, belt, wrist, and ankle mitt).
09.12 Apply comfort devices as directed (e.g. footboard, overbed cradle, sandbag, alternating pressure mattress).

09.13 Assist patient to dangle.
09.14 Assist patient to walk.
09.15 Assist patient in crutch-walking.
09.16 Assist patient in using cane.
09.17 Assist patient in using walker.
09.18 Assist patient in using wheelchair.

10.0 PROVIDE PERSONAL PATIENT CARE -- The student will be able to:

10.01 Give bed bath.
10.02 Assist with tub bath or shower.
10.03 Give shampoo.
10.04 Shave patient.
10.05 Provide skin care.
10.06 Provide foot care.
10.07 Groom hair.
10.08 Groom nails.
10.09 Assist with oral hygiene.
10.10 Give denture care.
10.11 Administer oral hygiene to an unconscious patient.
10.12 Assist with using bedside commode.
10.13 Assist with using bedpan.
10.14 Assist with using urinal.
10.15 Assist patient to dress.
10.16 Assist with meals.

11.0 PERFORM NURSING PROCEDURES -- The student will be able:

11.01 Admit patient.
11.02 Assist the RN with patient assessments.
11.03 Transfer patient.
11.04 Discharge patient.
11.05 Make unoccupied/occupied bed.
11.06 Make surgical bed.
11.07 Take and record patient's pulse and respiration.
11.08 Take and record patient's blood pressure.
11.09 Take and record patient's temperature.
11.10 Take and record patient's height and weight.
11.11 Assist patient in passive range of motion exercises.
11.12 Apply anti-embolic hose.
11.13 Collect routine urine specimen.
11.14 Strain urine.
11.15 Collect and test urine for sugar and acetone.
11.16 Collect timed urine specimen.
11.17 Monitor catheter drainage system.
11.19 Monitor fluid intake and output (I&O).
11.20 Observe, record, and report patient's emesis.
11.21 Apply hot and cold applications.
11.22 Assist patient with sitz bath.
11.23 Monitor and assist with care of catheters.
11.27 Monitor patient's following special procedures (e.g. I.V.P., myelogram, MRI, CAT scan).
11.28 Apply bandage.
11.29 Apply binders.
11.30 Apply brace.
11.31 Apply splints.
11.36 Obtain specimen from patient with indwelling catheter.
11.37 Measure urine specific gravity.
11.43 Perform neurological checks.
11.44 Give enema.
11.45 Logroll patient.
11.46 Collect stool specimen.
11.47 Collect sputum specimen.
11.61 Instruct patient in breathing exercises.
11.62 Obtain and test a drop of blood for sugar.
11.63 Assist with physical examination.
11.64 Assist patient with diagnostic procedures.

11.66 Administer and maintain oxygen.
11.67 Perform calculation and adjust IV flow rate.
11.68 Observe intravenous infusion and report signs of adverse reactions.
11.69 Inspect insertion site, change dressing, and remove IV needle or catheter from peripheral veins.
11.70 Assist with postmortem care.

13.0 APPLY PRINCIPLES OF NUTRITION -- The student will be able to:

13.01 Identify nutrients and food groups.
13.02 Explain regional, cultural, and religious food patterns.
13.03 Describe special diets.
13.04 List factors which must be considered when purchasing food.
13.05 Prepare a basic food plan.
13.06 List factors which must be considered when storing food.
13.07 Identify methods of food preparation.

STUDENT PERFORMANCE STANDARDS		EFFECTIVE DATE:	July, 1993
PROGRAM AREA:	Health Occupations	COURSE CREDIT:	1
PROGRAM TITLE:	Practical Nursing	PROGRAM NUMBER:	8418300
COURSE TITLE:	Practical Nursing 3	COURSE NUMBER:	

COURSE DESCRIPTION: This course provides the student with information regarding the aging process, the physical and psychosocial needs of the aged, selected medical and orthopedic conditions common to the aged and chronically ill including the management and nursing care of patients with these conditions.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skills in selected procedures, to apply the nursing process in meeting the needs of the aged and/or chronically ill patient, to practice and understand the role of the practical nurse as a member of the health team and to participate in the health teaching of the patient and family

17.0 PROVIDE CARE FOR GERIATRIC PATIENTS UTILIZING THE NURSING PROCESS -- The student will be able to:

17.01 Identify safety principles as related to the elderly.
17.02 Adapt safety principles as related to the elderly.
17.03 Describe general characteristics, particular needs, and problems of the elderly.
17.04 Identify attitudes and living habits which promote positive mental and physical health for the elderly.
17.05 Distinguish general characteristics, particular needs, and problems of the elderly.
17.06 Identify signs and symptoms of common disorders/diseases.
17.07 Identify community resources and services available to the elderly.
17.08 Apply Reality Orientation Techniques.
17.09 Provide and involve patients in diversional activities.
17.10 Identify common alterations in elderly patient behavior.
17.11 Provide care for patients with special needs (e.g. impaired hearing, impaired vision, immobility, impaired body functions).

20.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT -- The student will be able to:

20.01 Identify basic human needs.
20.02 Discuss family roles and their significance to health.
20.03 List community resources for individual and family health.
20.04 Identify components of the grief process.
20.05 Respond to emotional needs of patient and family.

22.0 ASSIST WITH REHABILITATIVE ACTIVITIES -- The student will be able to:

22.01 List the purposes of rehabilitation program.
22.02 Assist patient with specified rehabilitation needs.
22.03 Assist patients to reach optimum level of independence.

STUDENT PERFORMANCE STANDARDS		**EFFECTIVE DATE:**	July, 1993
PROGRAM AREA:	Health Occupations	**COURSE CREDIT:**	1
PROGRAM TITLE:	Practical Nursing	**PROGRAM NUMBER:**	8418300
COURSE TITLE:	Practical Nursing 4	**COURSE NUMBER:**	___________

Course Description: This course provides the student with information regarding common acute and chronic medical and surgical conditions including the management, needs and nursing care of patients with these conditions. Skills taught in this course include selected therapeutic procedures relating to these diseases and disorders.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skill in selected procedures including administration of medications, to apply the nursing process in meeting the needs of the surgical patient.

11.0 PERFORM NURSING PROCEDURES -- The student will be able to:

11.18 Collect clean-catch (midstream voided) urine specimen.
11.24 Apply pelvic belt for traction.
11.25 Apply cervical collar.
11.26 Monitor chest drainage system.
11.32 Care for patient in skin and skeletal traction.
11.33 Clean tong/pin site.
11.34 Change clean dressing.
11.35 Insert urinary catheter.
11.38 Remove retention catheter.
11.39 Change ostomy appliance.
11.40 Connect nasogastric tube to suction machine.
11.41 Remove nasogastric tube.
11.42 Administer gavage feeding.
11.48 Test stool for occult blood.
11.49 Perform naso-oral-pharyngeal suction.
11.50 Perform tracheostomy care.
11.51 Irrigate urinary catheter.
11.52 Monitor continuous urinary bladder irrigation.
11.53 Irrigate ear.
11.64 Irrigate eye.
11.55 Irrigate nasogastric tube.
11.56 Irrigate vaginal canal.
11.57 Irrigate wound.
11.58 Irrigate oral cavity.
11.59 Irrigate colostomy.
11.60 Collect gastric analysis specimen.
11.65 Set up vaporizer/humidifier.

12.0 ADMINISTER MEDICATION -- The student will be able to:

12.[illegible] Demonstrate the five rights of administering medication.
12.02 Observe and respond to patient's need for medication.
12.03 Administer topical medication.
12.04 Administer inhalants.
12.05 Administer oral medication.
12.06 Administer sublingual medication.
12.07 Administer rectal medication.
12.08 Administer vaginal medication.
12.09 Administer eye medications.
12.10 Administer ear drops.
12.11 Administer nose drops.
12.12 Administer intramuscular injection (including z-tract).
12.13 Administer intradermal injection.
12.14 Administer subcutaneous injection.
12.15 Monitor and document use of controlled substances.

12.16 Instill bladder medication.
12.17 Care for equipment and supplies used to administer medications.
12.18 Instruct patient regarding self-administer medications.
12.19 Observe and communicate effects of medications.
12.20 Document administration of medication and patient's response on medical record.
12.21 Store medications properly.
12.22 Assist patient with taking self-administered prescribed medication in the home.

14.0 PROVIDE CARE FOR MEDICAL/SURGICAL PATIENTS UTILIZING THE NURSING PROCESS -- The student will be able to:

14.01 Identify signs and symptoms of disease/disorders of the body systems.
14.02 Identify diagnostic tests used in the treatment of diseases/disorders of the body systems.
14.03 Identify medications used in the treatment of diseases/disorders of the body systems.
14.04 Identify nutritional needs of patients with diseases/disorders of the body systems.
14.05 Identify common alterations in patients with psychological disorders.
14.06 Care for the patient with respiratory disease/disorder.
14.07 Care for the patient with cardio-vascular disease/disorder.
14.08 Care for the patient with muscular-skeletal disease/disorder.
14.09 Care for the patient with nervous, skin, and sensory disease/disorder.
14.10 Care for the patient with reproductive disease/disorder.
14.11 Care for the patient with urinary disease/disorder.
14.12 Care for the patient with digestive disease/disorder.
14.13 Care for the patient with endocrine disease/disorder.

19.0 PROVIDE CARE FOR PRE-OPERATIVE AND POST-OPERATIVE PATIENTS UTILIZING THE NURSING PROCESS -- The student will be able to:

19.01 Provide pre-operative teaching.
19.02 Shave and prep patient.
19.03 Prepare patient for operating room.
19.04 Prepare patient's medical records for operating room.
19.05 Provide post-operative care.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations

COURSE CREDIT: 1

PROGRAM TITLE: Practical Nursing

PROGRAM NUMBER: 8418300

COURSE TITLE: Practical Nursing 5

COURSE NUMBER: __________

Course Description: This course is a continuation of Practical Nursing 4. Clinical experiences will allow the student to practice the role of the practical nurse as a member of the health team and to participate in the health teaching of the patient and family.

STUDENT PERFORMANCE STANDARDS		EFFECTIVE DATE:	July, 1993
PROGRAM AREA:	Practical Nursing	COURSE CREDIT:	1
PROGRAM TITLE:	Practical Nursing	PROGRAM NUMBER:	8418300
COURSE TITLE:	Practical Nursing 6	COURSE NUMBER:	__________

Course Description: This course will provide the student with information relating to normal pregnancy, labor and delivery, the puerperium and the normal newborn. Selected deviation from the normal in all of these areas is also covered. Management, needs and nursing care of the mother and infant throughout the maternity cycle are emphasized. Skills taught in this course include selected therapeutic procedures relating to the care of the obstetrical patient and the newborn.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skill in selected procedures, to apply nursing process in meeting the needs of the obstetrical patient and the newborn, to practice the role of the practical nurse as a member of the health team and to participate in the health teaching of the patient and family.

15.0 CARE FOR MATERNAL/NEWBORN PATIENT UTILIZING THE NURSING PROCESS -- The student will be able to:

15.01 Describe prenatal care.
15.02 Admit patient to labor and delivery
15.03 Monitor contractions.
15.04 Monitor fetal heart rate.
15.05 Recognize signs of fetal distress.
15.06 Prepare patient for Caesarean.
15.07 Describe care during delivery process.
15.08 Describe Apgar score.
15.09 Suction infant's respiratory passage with bulb syringe.
15.10 Identify infant using mother's bracelet.
15.11 Weigh and measure infant.
15.12 Bathe infant.
15.13 Carry infant.
15.14 Feed infant.
15.15 Collect urine specimen from infant.
15.16 Provide post-partum care.
15.17 Perform perineal care.
15.18 Provide breast care.
15.19 Instruct mother in infant care.
15.20 Assist with circumcision.
15.21 Apply dressing to circumcision site.
15.22 Clean infant genitalia and diaper.
15.23 Discharge obstetric patient.

EFFECTIVE DATE: July, 1993

STUDENT PERFORMANCE STANDARDS

COURSE CREDIT: 1

PROGRAM AREA: Health Occupations

PROGRAM NUMBER: 8418300

PROGRAM TITLE: Practical Nursing

COURSE NUMBER: ___________

COURSE TITLE: Practical Nursing 7

Course Description: This course provides the student with information relating to normal patterns of growth and development and common illnesses occurring in childhood including needs and nursing care of the child. Skills taught in this course include selected therapeutic procedures including administration of medications.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skill in selected procedures, to apply the nursing process in meeting the needs of the child to practice the role of the practical nurse as a member of the health team and to participate in the health teaching of the child and family.

16.0 PROVIDE CARE FOR PEDIATRIC PATIENTS UTILIZING THE NURSING PROCESS -- The student will be able to:

16.01 Adapt nursing care for the pediatric patient.
16.02 Apply safety principles for the pediatric patient.
16.03 Describe general characteristics, particular needs, and problems of pediatric patients.
16.04 Prepare patient and family for the hospital experience.
16.05 Identify signs and symptoms of common disorders/diseases.
16.06 Implement prescribed nutritional requirement.
16.07 Provide diversion and recreational activities.

STUDENT PERFORMANCE STANDARDS		EFFECTIVE DATE:	July, 1993
		COURSE CREDIT:	1
PROGRAM AREA:	Health Occupations		
PROGRAM TITLE:	Practical Nursing	PROGRAM NUMBER:	8418300
COURSE TITLE:	Practical Nursing 8	COURSE NUMBER:	

Course Description: This course will provide the student with the opportunity to learn to plan, administer, and evaluate the nursing care of patients with complicated disorders of all systems of the body. Experiences will afford students with the opportunity to study the comprehensive principles of nursing dealing with the entire health team. Emphasis is placed on the development of confidence in performing nursing skills, skills in group planning for patient care, and the utilization of all available hospital and community resources for meeting the total needs of the patient. Employability skills and NCLEX review are included.

21.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS -- The student will be able to:

21.01 Organize patient care assignments.
21.02 Complete assignments accurately and in a timely manner.
21.03 Complete requisitions.

23.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

23.01 Conduct a job search.
13.02 Secure information about a job.
23.03 Identify documents that may be required when applying for a job.
23.04 Complete a job application.
23.05 Demonstrate competence in job interview techniques.
23.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
23.07 Identify acceptable work habits.
23.08 Demonstrate knowledge of how to make job changes appropriately.
23.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK
FLORIDA DEPARTMENT OF EDUCATION

PROGRAM AREA: Health Occupations
EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Psychiatric Technology

CODE NUMBER: Secondary ______ Postsecondary H181106

Florida CIP 0318.110600

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____7-9 ____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: PRAC NURSE @ 7 G MENT HEAL @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as psychiatric aides (66014440) or psychiatric technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, nursing assistance skills, physical assessment, depression, schizophrenia, personality disorders, charting, obsessive compulsive behavior, anxiety values, crisis intervention, coma, hallucinations, organic brain syndrome, manic/depressive illness, electro convulsive therapy, group therapy, medications, adjunctive therapy, employability skills, leadership and human relations skills, and health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities and clinical experiences are an integral part of this program which should be correlated with the didactic instruction.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0, and Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 450 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Participate in observing patients' physical and behavioral reactions to medications.
02. Provide emergency services through crisis intervention techniques and/or medications as prescribed.
03. Conduct individual, group, remotivation, family and drug discussion groups to facilitate patients' rehabilitation.
04. Participate in home visits and crisis intervention to prevent hospitalization or rehospitalization.
05. Participate as a member of a multi-disciplinary team in the planning and implementation of treatment for individual patients.
06. Provide services to staff for treatment programs at the ward level in terms of therapeutic communities and patient government.
07. Demonstrate employability skills.
08. Perform nursing assisting skills.
09. Use human relations skills in motivating others.
10. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993
PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______
PROGRAM TITLE: Psychiatric Technology POSTSECONDARY NUMBER: H181106

01.0 PARTICIPATE IN OBSERVING PATIENTS' PHYSICAL AND BEHAVIORAL REACTIONS TO MEDICATIONS -- The student will be able to:

01.01 List the observable physical signs indicating a medication reaction which should be reported.
01.02 Discuss behavioral changes which might occur from medications other than expected changes.
01.03 Seek assistance and initiate resuscitation measures when appropriate.
01.04 Report completely and accurately to team leader or head nurse.

02.0 PROVIDE EMERGENCY SERVICES THROUGH CRISIS INTERVENTION TECHNIQUES AND/OR MEDICATIONS AS PRESCRIBED -- The student will be able to:

02.01 Recognize suicidal behavior as a cry for help and provide emergency psychologic aid by establishing open communication, reminding the patient of his identity, and help him to identify the problem which precipitated the crisis.
02.02 Offer constructive help with the problem.
02.03 Remind the patient that others care.
02.04 Record/report events accuratley.
02.05 Assist with medication if ordered.
02.06 Maintain professional growth through attending conferences, workshops and inservice programs, and reading current literature on this topic.
02.07 Discuss the methods of suicide.
02.08 Observe suicidal patient and note the hazards.

03.0 CONDUCT INDIVIDUAL, GROUP, REMOTIVATION, FAMILY AND DRUG DISCUSSION GROUPS TO FACILITATE PATIENTS' REHABILITATION -- The student will be able to:

03.01 Demonstrate sensitivity to patient's verbal and non verbal communication, changes in thought processes, mood and behavior.
03.02 Document clinical condition of patient's progress and responses to therapy and patient teaching.
03.03 Execute skillful interactions.
03.04 Maintain the professional attitude of a therapeutic environment.
03.05 Discuss four kinds of involuntary admissions.
03.06 Discuss elopement precautions, methods, and patient observation.
03.07 Describe four techniques used in a physical assessment.
03.08 Examine the patient's head and neck and list the pertinent items to observe.
03.09 List causes of changes in skin color, moisture, texture, temperature, mobility, and turgor.
03.10 Describe normal pupillary reactions-direct and consensual constriction and accomodation.

04.0 PARTICIPATE IN HOME VISITS AND CRISIS INTERVENTION TO PREVENT HOSPITALIZATION OR REHOSPITALIZATION -- The student will be able to:

04.01 Accept this expanded role as delegated by the head nurse.
04.02 Accompany patient to home if requested by head nurse.
04.03 Accompany the psychiatric nurse or physician to a patients home if assigned.
04.04 Assist in planned care.

05.0 PARTICIPATE AS A MEMBER OF A MULTI_DISCIPLINARY TEAM IN THE PLANNING AND IMPLEMENTATION OF TREATMENT FOR INDIVIDUAL PATIENTS

-- The student will be able to:

05.01 Relate unit problems and needs to the team leader, or head nurse as appropriate.
05.02 Contribute to the formulation of unit goals for individual patient.
05.03 Share in the planning-decision making through staff meetings.
05.04 Support hospital policies and procedures as well as use the procedure manual for the psychiatric unit.
05.05 Display understanding of the limitations of the role of the psychiatric technician.
05.06 Display cooperation when asked to work other shifts or change assignments.
05.07 Demonstrate ability to function independently without constant supervision.
05.08 Show respect for coworkers and be able to interpret the organizational chart.
05.09 Maintain own proper physical, emotional, and mental health through proper application of body mechanics giving constructive criticism, and utilizing appropriate coping mechanisms.

06.0 PROVIDE SERVICES TO STAFF FOR TREATMENT PROGRAMS AT THE WARD LEVEL IN TERMS OF THERAPEUTIC COMMUNITIES AND PATIENT GOVERNMENT

-- The student will be able to:

06.01 Promote a healthy interpersonal relationship with peers-show respect and recognition.
06.02 Initiate or assist in the orientation, education and training of new persons on the unit.
06.03 Facilitate positive communication among peers.
06.04 Give pertinent report to other members of the health care team regarding assigned patient care.
06.05 Demonstrate understanding of the condition of assigned patients.
06.06 Collaborate with other team members in proper application of the nursing process (assessment, planning, implementation and evaluation).
06.07 Adhere to proper dress code.
06.08 List and explain four objectives of a health history.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

07.01 Conduct a job search.
07.02 Secure information about a job.
07.03 Identify documents that may be required when applying for a job.
07.04 Complete a job application.
07.05 Demonstrate competence in job interview techniques.
07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
07.07 Identify acceptable work habits.
07.08 Demonstrate knowledge of how to make job changes appropriately.
07.09 Demonstrate acceptable employee health habits.

08.0 PERFORM NURSING ASSISTING SKILLS -- The student will be able to:

08.01 Take and record vital signs.
08.02 Recognize and report symptoms of abuse and neglect.
08.03 Weigh and measure patient.
08.04 Record intake and output.
08.05 Perform urine sugar and acetone tests.
08.06 Perform catheter care.
08.07 Apply restraints as ordered.
08.08 Perform decubitus care.
08.09 Perform bed baths and assist patient with tub or shower.
08.10 Make beds.
08.11 Transfer patients.

08.12 Assist with electroconvulsive therapy (ECT).
08.13 Give pre and post ECT care.
08.14 Use proper body mechanics.
08.15 Establish good rapport with patients and others.
08.16 Discuss the use of the seclusion room.
08.17 Formulate a care plan consulting directly with team leader.
08.18 Demonstrate knowledge of sexually transmitted diseases including AIDS.
08.19 Discuss the following behaviors: aggressive patient, depressed patient, withdrawn patient, hallucinating patient, delusional patient, suspicious patient, anxious patient, manipulative patient.

09.0 USE HUMAN RELATIONS SKILLS IN MOTIVATING OTHERS

-- The student will be able to:

09.01 Intervene appropriately in nursing care rather than rely on a rigidly structured plan of care.
09.02 Ensure quality patient care by developing good rapport and understanding of patient needs.
09.03 Recognize that all human behavior is meaningful and goal directed.
09.04 Promote effective communication through skillful interviewing techniques and base assessments and therapeutic decisions on an understanding of the patients psychodynamics.
09.05 Demonstrate skill in using a one to one relationship with the patient based on an understanding of psychodynamics.
09.06 Obtain meaningful information leading to an appropriate nursing intervention.
09.07 State three behaviors which are essential in an effective nurse/patient relationship.
09.08 Differentiate between direct and open-ended questioning.
09.09 Listen carefully and non-judgmentally.

10.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS

-- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
10.02 Identify community resources and services available to the victims of immune-deficiency diseases.
10.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
10.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Radiation Protection Technology

CODE NUMBER: Secondary _______ Postsecondary ______

Florida CIP 0341.020300

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other _________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as engineering technicians, radiation monitors (199.167-010), scientific helpers (199.364-019), or radiation protection technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, nuclear and radiation physics; detection, control and measurement of radioactive materials; legal and ethical aspects; worker and public protection against radioactivity; health and safety including CPR; and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory and field activities incorporate practical application of scientific principles and are a required portion of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. Students are encouraged to become members of their appropriate professional organization.

After three years experience in the nuclear power industry, graduates are eligible to take the certification examination given by the National Registry for Radiation Protection Technicians provided security requirements have been met.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree .

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of protection standards and professional aspects related to the use of fissionable and radioactive materials.
02. Demonstrate knowledge of various communication skills.
03. Demonstrate knowledge of basic and applied mathematics and science required for understanding and practice of radiological protection techniques.
04. Demonstrate knowledge of detection, sources, decay, interaction and measurement of radioactivity.
05. Demonstrate knowledge of worker and public protection against the biological effects and risks of exposure to ionizing radiation.
06. Demonstrate knowledge of the handling of radioactive materials and radioactive contamination control.
07. Demonstrate knowledge of radiation exposure control.
08. Demonstrate knowledge of calibration and use of instruments to measure and detect radiation.
09. Demonstrate knowledge of environmental radiation monitoring and control.
10. Demonstrate knowledge of nuclear power plant technology and radiation control procedures.
11. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Radiation Protection Technology POSTSECONDARY NUMBER: 0341.020300

01.0 DEMONSTRATE KNOWLEDGE OF PROTECTION STANDARDS AND PROFESSIONAL ASPECTS RELATED TO THE USE OF FISSIONABLE AND RADIOACTIVE MATERIALS -- The student will be able to:

01.01 Demonstrate knowledge of the professional responsibilities of persons using fissionable and radioactive materials.
01.02 Demonstrate knowledge of radiation protection standards and guidelines and identify related regulatory and advisory organizations.
01.03 Demonstrate knowledge of Nuclear Regulatory Commission (NRC) and Department of Transportation (DOT) standards and their implementation.

02.0 DEMONSTRATE KNOWLEDGE OF VARIOUS COMMUNICATION SKILLS -- The student will be able to:

02.01 Demonstrate acceptable oral communication.
02.02 Demonstrate written communication through radiation work permits and other written records.
02.03 Practice acceptable interpersonal relations skills.
02.04 Demonstrate an awareness of the application of computer skills for word processing and record keeping.

03.0 DEMONSTRATE KNOWLEDGE OF BASIC AND APPLIED MATHEMATICS AND SCIENCE REQUIRED FOR UNDERSTANDING AND PRACTICE OF RADIOLOGICAL PROTECTION TECHNIQUES -- The student will be able to:

03.01 Practice basic mathematics, metric conversion and graphing skills.
03.02 Use exponents, radicals, scientific notation and manipulate algebraic expressions as required in radiological protection technology.
03.03 Demonstrate knowledge of chemical structures, properties and the solution of simple chemical equations.

04.0 DEMONSTRATE KNOWLEDGE OF DETECTION, SOURCES, DECAY, INTERACTION AND MEASUREMENT OF RADIOACTIVITY -- The student will be able to:

04.01 Characterize alpha particles, beta particles, gamma rays and neutrons.
04.02 Demonstrate knowledge of radioactivity and radioactive decay.
04.03 Identify and quantify major sources of background radiation and those sources of radiation routinely found in nuclear power plants.
04.04 Identify radiological quantities, differentiate between dose and dose rate and convert radiological units to respective subunits.
04.05 Demonstrate knowledge of the principles of radiation detection and measurement.
04.06 Apply exponential buildup and decay in solving radioactive decay and gamma ray shielding problems.
04.07 Demonstrate knowledge of isotopes, mass-energy equivalence, nuclear forces, binding energy, and simple nuclear equations.
04.08 Demonstrate knowledge of fission and fusion and related yields.
04.09 Demonstrate knowledge of the statistical nature of radioactive decay, calculation of minimum detectable activity and the importance of the statistical accuracy of measurement.

05.0 DEMONSTRATE KNOWLEDGE OF WORKER AND PUBLIC PROTECTION AGAINST THE BIOLOGICAL EFFECTS AND RISKS OF EXPOSURE TO IONIZING RADIATION -- The student will be able to:

05.01 Demonstrate knowledge of the biological effects and risks associated with exposure to ionizing radiation.
05.02 Describe the acute radiation syndrome.
05.03 Describe the somatic and genetic effects of radiation exposure.
05.04 Identify the long-term health risks associated with low-level radiation exposure as related to personal and public health concerns.
05.05 Estimate dose to internal organs from swallowing and breathing radioactivity.
05.06 Define maximum permissible concentration in air (MPCa) of airborn activity.
05.07 Discuss biological half-life and effective half-life.

06.0 DEMONSTRATE KNOWLEDGE OF THE HANDLING OF RADIOACTIVE MATERIALS AND RADIOACTIVE CONTAMINATION CONTROL -- The student will be able to:

06.01 Demonstrate knowledge of dangers engendered by and techniques for decontamination of spilled and mishandled radioactive materials.
06.02 Identify the sources of radioactive contamination.
06.03 Demonstrate proper survey techniques.
06.04 Demonstrate proper techniques and procedures for limiting the spread of radioactive contamination.
06.05 Post contamination areas properly with required signs.
06.06 Identify, plan contamination monitoring systems, related operating principles and capabilities.
06.07 Properly select, don and remove anticontamination clothing.
06.08 Demonstrate knowledge of radioactive material storage and related procedures.
06.09 Implement regulatory procedures for shipping and receiving radioactive materials.
06.10 Describe solid waste compactor operations and related problems.
06.11 Describe controls governing radiological waste systems and contaminated laundry.
06.12 Discuss procedures for mininizing solid and liquid radioactive waste.
06.13 Demonstrate knowledge of the hazards associated with waste solidification.

07.0 DEMONSTRATE KNOWLEDGE OF RADIATION EXPOSURE CONTROL -- The student will be able to:

07.01 Demonstrate knowledge and use of selected respiratory equipment.
07.02 Enter confined spaces and work under subatmospheric conditions when applicable.
07.03 Define personnel dosimetry requirements for gamma rays, beta particles and neutrons and identify related long term effects of this exposure.
07.04 Explain the operating characteristics of dosimeters worn by personnel and relative advantages and disadvantages.
07.05 Discuss personnel dosimetry administrative control and exposure records.
07.06 Utilize the principles of time, distance, and shielding to reduce personnel exposure.

08.0 DEMONSTRATE KNOWLEDGE OF CALIBRATION AND USE OF INSTRUMENTS TO MEASURE AND DETECT RADIATION -- The student will be able to:

08.01 Describe the operation and characteristics of radiation detectors, dosimeters and single and multi-channel analyzers.
08.02 Describe the factors affecting instrument efficiency and calculation of efficiency.
08.03 Differentiate between radiation field survey instruments and radioactive contamination survey instruments.

08.04 Perform gamma ray shielding calculations.
08.05 Convert meter reading to radioactivity levels.
08.06 Demonstrate the use of portable air sampling equipment.
08.07 Describe the operation of CAM's, ARM's, hand and foot monitors and portal monitors.
08.08 Operate and calibrate radiological survey and monitoring instruments.

09.0 DEMONSTRATE KNOWLEDGE OF ENVIRONMENTAL RADIATION MONITORING AND CONTROL -- The student will be able to:

09.01 Identify ventilation and filtration systems in a nuclear power plant.
09.02 Identify techniques for reducing airborne activity.
09.03 Identify airborne radionuclides in a nuclear power plant.
09.04 Demonstrate knowledge of environmental sampling and evaluation.

10.0 DEMONSTRATE KNOWLEDGE OF NUCLEAR POWER PLANT TECHNOLOGY AND RADIATION CONTROL PROCEDURES -- The student will be able to:

10.01 Demonstrate knowledge of plant safety and containment of radioactivity.
10.02 Demonstrate knowledge of the purpose and major components of a nuclear power plant.
10.03 Describe flow paths and interactions of plant systems.
10.04 Demonstrate knowledge of nuclear power plant operations, maintenance and operating procedures.
10.05 Identify radiological conditions which could result in accidents.
10.06 Demonstrate knowledge of radiological emergency procedures.
10.07 Demonstrate knowledge of incident evaluation and control.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application correctly.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.
11.10 Compile a comprehensive resume.
11.11 Identify "fitness for duty" requirements that may be required when accepting employment (at a nuclear power plant).

CURRICULUM FRAMEWORK
PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION
EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Radiation Therapy Specialist

CODE NUMBER: Secondary ________ Postsecondary ________

Florida CIP 0317.020903

SECONDARY SCHOOL CREDITS ______
COLLEGE CREDITS X
POSTSECONARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational Certificate
______ Other ________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as x-ray technicians, radiologic technologists (078.362-026), or radiation therapists, or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the American Medical Association Committee on Allied Health Education and Accreditation to enable graduates to become candidates for examination in radiation therapy technology by the American Registry of Radiologic Technologists. It may also be approved by the Department of Health and Rehabilitative Services so that the graduate is eligible for licensure in Florida as a certified radiation Therapy Technologists.

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Therapist, uses ionizing radiation to treat disease. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform radiation therapy procedures with skill and understanding to practice the art and science of radiation therapy technology; to administer the prescribed radiation therapy treatments of the highest caliber, thereby providing the patient treatments of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient, to provide radiation protection to the patient, self and health care team; to work with the health care team to improve radiotherapeutic health care in the hospital and community; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instructional and applied laboratory procedures or practice.

II. LABORATORY/CLINICAL ACTIVITIES: Radiation therapy centers which provide clinical experiences for students must meet the criteria for Major Cancer Management Centers published by the American College of Radiology. Students must be under the supervision of a qualified Radiation Therapy Technologist, RTT (ARRT) and radiation therapist.

Clinical education has been established for the students in these programs. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical education component of the program. After completion of the prerequisite practice of radiotherapeutic procedures, students indicate readiness for evaluation in a specific category to the clinical affiliate or faculty in the assigned clinical education center.

Clinical education and laboratory activities facilitate student rotations to provide them equitable opportunity to achieve the program clinical objective utilizing multiple affiliates. The resulting clinical rotation and laboratory practicum provides students with patient treatment techniques utilizing a variety of megavoltage equipment, radiation therapy patient care procedures, localization and treatment, radiation therapy physics including dosimetry, machine calibration, quality assurance, handling of sealed radioactive sources an protection, follow up, patient care and patient recordkeeping.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students are encouraged to become members of their appropriate professional organization.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 750 hours or the College Credit Certificate.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Deliver a planned course of radiation therapy.
02. Verify the mathematical accuracy of the prescription.
03. Maintain daily records and document technical details of the treatment administered.
04. Observe the clinical progress of the patient undergoing radiation therapy; recognize the first signs of any complication; and determine when treatment should be withheld until a physician may be consulted.
05. Provide patient care and comfort essential to radiation therapy procedures.
06. Detect equipment malfunctions; report same to the proper authority; and know the safe limits of equipment operation.
07. Apply the rules and regulations for radiation safety; detect any radiation hazards; and maintain control in the event of a radiation accident.
08. Understand the function of equipment and utilize equipment to its full potential.
09. Demonstrate the use of all treatment accessories.
10. Construct immobilization and beam-directional devices and prepare brachytherapy molds.
11. Assist in the preparation of brachytherapy sources.
12. Assist the physicist in calibration of equipment and in treatment planning procedures.
13. Participate in the patient follow-up program and in recording statistical data.
14. Demonstrate employability skills.
15. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS **EFFECTIVE DATE:** July, 1993

PROGRAM AREA: Health Occupations **SECONDARY NUMBER:** ________________

PROGRAM TITLE: Radiation Therapy Specialist **POSTSECONDARY NUMBER:** ____________

01.0 DELIVER A PLANNED COURSE OF RADIATION THERAPY -- The student will be able to:

01.01 Orient patient to the planned treatment procedure and give emotional support.
01.02 Identify patient scheduled for treatment by arm band, photograph, or verbally and help patient onto and off the treatment table with the aid of assistants, when necessary, using proper body mechanics to avoid injury to patient or technologist.
01.03 Position patient to reproduce set-up indicated in the treatment chart, using positioning aids and immobilization devices.
01.04 Position treatment machine to reproduce set-up indicated by the approved treatment plan.
01.05 Set appropriate controls on treatment machine console (e.g., modality, energy, monitor units, time) and activate machine to deliver prescribed treatment indicated on treatment plan.
01.06 Discuss with physician any questions concerning patient's prescription.

02.0 VERIFY THE MATHEMATICAL ACCURACY OF THE PRESCRIPTION -- The student will be able to:

02.01 Calculate the number of monitor units/exposure time for each treatment session to achieve the prescribed dose indicated by the physician, taking into account such factors as the energy of the beam, number of and orientation of the beam(s), SSD or SAD, depth of tumor, patient thickness, size and shape of portal, use of wedges, et cetera.
02.02 Record factors used in the calculation of monitor units/exposure time onto treatment chart to allow checking of calculations for correctness.
02.03 Recognize if proposed treatment plan appears to deliver inappropriate dose to critical structures in order to alert the physician.

03.0 MAINTAIN DAILY RECORDS AND DOCUMENT TECHNICAL DETAILS OF THE TREATMENT ADMINISTERED -- The student will be able to:

03.01 Obtain and process verification radiographs for documentation of accuracy of field position.
03.02 Set up preliminary treatment field and take a radiograph with the field marked by collimator wires, solder wire, or lead ladders taped to the patient's skin.
03.03 Record information on treatment chart, describing the conditions used in the simulation, to aid in their reproduction (e.g., patient position, technique and positioning devices) on the treatment machine.

04.0 OBSERVE THE CLINICAL PROGRESS OF THE PATIENT UNDERGOING RADIATION THERAPY; RECOGNIZE THE FIRST SIGNS OF ANY COMPLICATION; AND DETERMINE WHEN TREATMENT SHOULD BE WITHHELD UNTIL A PHYSICIAN MAY BE CONSULTED -- The student will be able to:

04.01 When requested, measure and record vital signs (blood pressure, respiratory rate, pulse rate and temperature).
04.02 Schedule patient for blood studies and record result (e.g., platelets, WBC, PVC, [HCT]) on treatment chart to provide record of effects of radiation on patient during course of treatment,

and report abnormal results to physician.

04.03 Observe and/or question patient regarding nutritional status offering dietary hints or referring patient to appropriate personnel for management.

04.04 Observe and question patient about any side effects or problems he/she may be experiencing, and notify physician.

05.0 PROVIDE PATIENT CARE AND COMFORT ESSENTIAL TO RADIATION THERAPY PROCEDURES -- The student will be able to:

05.01 Answer patient's questions regarding treatment related topics or refer to the physician when inappropriate for RTT to answer.

05.02 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen tanks) to avoid endangering the patient during the therapy procedure using knowledge of such hospital apparatus.

05.03 Educate patient concerning proper skin care of treatment area(s).

05.04 Recognize and report symptoms of abuse and neglect.

06.0 DETECT EQUIPMENT MALFUNCTIONS; REPORT SAME TO THE PROPER AUTHORITY, AND KNOW THE SAFE LIMITS OF EQUIPMENT OPERATION -- The student will be able to:

06.01 Warm up treatment machines and/or simulators and check all safety and operation procedures according to manufacturer's operating manual for possible malfunction.

06.02 Monitor console of treatment machine to spot any malfunctioning of equipment during treatment using indicators on machine, and take appropriate action when necessary to assure safety of patient and personnel.

06.03 Maintain treatment machines and accessories to minimize necessary interruptions in treatment due to mechanical breakdown.

07.0 APPLY THE RULES AND REGULATIONS FOR RADIATION SAFETY; DETECT ANY RADIATION HAZARDS; AND MAINTAIN CONTROL IN THE EVENT OF RADIATION ACCIDENT -- The student will be able to:

07.01 Wear a monitoring device while on duty to obtain a record of radiation exposure over a period of time.

07.02 Protect workers and others in the area from radiation exposure by closing door to treatment room to activate interlock.

07.03 Monitor patient visually (directly or indirectly) and by intercommunication system to insure patient's safety and accuracy of treatment.

08.0 UNDERSTAND THE FUNCTION OF EQUIPMENT AND UTILIZE EQUIPMENT TO ITS FULL POTENTIAL -- The student will be able to:

08.01 Position patient on simulator table in proper orientation to the simulator using positioning aids and immobilization devices.

08.02 Assist physician in localizing tumor volume and critical organs using radiographic techniques, with or without contrast media.

08.03 Process films to produce finished radiographs and have physician approve treatment (field) area indicated in film.

09.0 DEMONSTRATE THE USE OF ALL TREATMENT ACCESSORIES -- The student will be able to:

09.01 Assist physician in determining optimum fields to cover volume of interest utilizing knowledge of shape of field, gantry angle, blocks, et cetera.

09.02 Take contours of body parts for use in treatment planning using methods or materials such a solder wire, pin device, pantograph, CT, et cetera.

09.03 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen masks) to avoid endangering the patient during procedure, using knowledge of such hospital apparatus.

10.0 CONSTRUCT IMMOBILIZATION AND BEAM DIRECTIONAL DEVICES AND PREPARE BRACHYTHERAPY MOLDS -- The student will be able to:

10.01 When procedure requires, manufacture individualized immobilization devices to aid in the replication of the treatment set-up (e.g., bite blocks, molds, plaster shells).
10.02 When appropriate, measure and record information necessary to fabricate blocks or accessories required for treatment.
10.03 Prepare custom blocks for use in shaping treatment field by cutting lead blocks or using molten metal techniques.

11.0 ASSIST IN THE PREPARATION OF BRACHYTHERAPY SOURCES -- The student will be able to:

11.01 Take placement radiographs of implants to be used in dose calculation and placement verification according to protocol.
11.02 Assist with measurement and recording of the necessary parameters for calculation of the dose to be delivered.
11.03 Assist with brachytherapy using knowledge of radionuclides employed and interstitial and intracavitary applications as integrated into the patient treatment plan.

12.0 ASSIST THE PHYSICIST IN CALIBRATION OF EQUIPMENT AND IN TREATMENT PLANNING PROCEDURES -- The student will be able to:

12.01 Check dose rate by measuring radiation dose reading at standard distance and standard conditions,, and then compare with proper standard using appropriate radiation measuring devices (e.g., Victoreen Timble Chamber).
12.02 Perform light field test on treatment machine to check alignment of collimator light and cross hairs with treatment beam by setting a standard field size, exposing a radiograph and physically measuring the field size recorded on the radiograph.
12.03 Check rotation by setting gantry so it goes through complete arc.

13.0 PARTICIPATE IN THE PATIENT FOLLOW UP PROGRAM AND IN RECORDING STATISTICAL DATA -- The student will be able to:

13.01 Assist physician with the physical examinations of patients (e.g., preparing patient, examination room, instruments).
13.02 Clean, wash, disinfect and/or sterilize facility and equipment, and dispose of contaminated items in preparation for next patient.
13.03 Apply infection control techniques following Center for Disease Control (CDC) guidelines.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when apply for a job.
14.04 Complete a job application correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate acceptable employee health habits.
14.10 Recognize the need for continuing education to up-date knowledge and skills.

15.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS

-- The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.

15.02 Identify community resources and services available to the victims of immune-deficiency diseases.

15.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.

15.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

15.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Radiation Therapy Technology

CODE NUMBER: Secondary ________ Postsecondary ________

Florida CIP 0317.020901

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): ______7-9 ______9-12 ______Postsecondary Adult Vocational

x Postsecondary Vocational ______Other

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as x-ray technicians, radiologic technologists (078.362-026), or radiation therapists, or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the American Medical Association Committee on Allied Health Education and Accreditation to enable graduates to become candidates for examination in radiation therapy technology by the American Registry of radiologic technologists. It may also be approved by the Department of Health and Rehabilitative Services so that the graduate is eligible for licensure in Florida as a certified radiation Therapy Technologists.

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Therapist, uses ionizing radiation to treat disease. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform radiation therapy procedures with skill and understanding to practice the art and science of radiation therapy technology; to administer the prescribed radiation therapy treatments of the highest caliber, thereby providing the patient treatments of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient, to provide radiation protection to the patient, self and health care team; to work with the health care team to improve radiotherapeutic health care in the hospital and community; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instructional and applied laboratory procedures or practice.

II. LABORATORY/CLINICAL ACTIVITIES: Radiation therapy centers which provide clinical experiences for students must meet the criteria for Major Cancer Management Centers published by the American College of Radiology. Students must be under the supervision of a qualified Radiation Therapy Technologist, RTT (ARRT) and radiation therapist.

Clinical education has been established for the students in these programs. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical education component of the program. After completion of the prerequisite practice of radiotherapeutic procedures, students indicate readiness for evaluation in a specific category to the clinical affiliate or faculty in the assigned clinical education center.

Clinical education and laboratory activities facilitate student rotations to provide them equitable opportunity to achieve the program clinical objective utilizing multiple affiliates. The resulting clinical rotation and laboratory practicum provides students with patient treatment techniques utilizing a variety of megavoltage equipment, radiation therapy patient care procedures, localization and treatment, radiation therapy physics including dosimetry, machine calibration, quality assurance, handling of sealed radioactive sources and protection, follow up, patient care and patient recordkeeping.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students are encouraged to become members of their appropriate professional organization.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Deliver a planned course of radiation therapy.
02. Verify the mathematical accuracy of the prescription.
03. Maintain daily records and document technical details of the treatment administered.
04. Observe the clinical progress of the patient undergoing radiation therapy; recognize the first signs of any complication; and determine when treatment should be withheld until a physician may be consulted.
05. Provide patient care and comfort essential to radiation therapy procedures.
06. Detect equipment malfunctions; report same to the proper authority; and know the safe limits of equipment operation.
07. Apply the rules and regulations for radiation safety; detect any radiation hazards; and maintain control in the event of a radiation accident.
08. Understand the function of equipment and utilize equipment to its full potential.
09. Demonstrate the use of all treatment accessories.
10. Construct immobilization and beam-directional devices and prepare brachytherapy molds.
11. Assist in the preparation of brachytherapy sources.
12. Assist the physicist in calibration of equipment and in treatment planning procedures.
13. Participate in the patient follow-up program and in recording statistical data.
14. Demonstrate employability skills.
15. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: __________

PROGRAM TITLE: Radiation Therapy Technology POSTSECONDARY NUMBER: __________

01.0 DELIVER A PLANNED COURSE OF RADIATION THERAPY -- The student will be able to:

01.01 Orient patient to the planned treatment procedure and give emotional support.

01.02 Identify patient scheduled for treatment by arm band, photograph, or verbally and help patient onto and off the treatment table with the aid of assistants, when necessary, using proper body mechanics to avoid injury to patient or technologist.

01.03 Position patient to reproduce set-up indicated in the treatment chart, using positioning aids and immobilization devices.

01.04 Position treatment machine to reproduce set-up indicated by the approved treatment plan.

01.05 Set appropriate controls on treatment machine console (e.g., modality, energy, monitor units, time) and activate machine to deliver prescribed treatment indicated on treatment plan.

01.06 Discuss with physician any questions concerning patient's prescription.

02.0 VERIFY THE MATHEMATICAL ACCURACY OF THE PRESCRIPTION -- The student will be able to:

02.01 Calculate the number of monitor units/exposure time for each treatment session to achieve the prescribed dose indicated by the physician, taking into account such factors as the energy of the beam, number of and orientation of the beam(s), SSD or SAD, depth of tumor, patient thickness, size and shape of portal, use of wedges, et cetera.

02.02 Record factors used in the calculation of monitor units/exposure time onto treatment chart to allow checking of calculations for correctness.

02.03 Recognize if proposed treatment plan appears to deliver inappropriate dose to critical structures in order to alert the physician.

03.0 MAINTAIN DAILY RECORDS AND DOCUMENT TECHNICAL DETAILS OF THE TREATMENT ADMINISTERED -- The student will be able to:

03.01 Obtain and process verification radiographs for documentation of accuracy of field position.

03.02 Set up preliminary treatment field and take a radiograph with the field marked by collimator wires, solder wire, or lead ladders taped to the patient's skin.

03.03 Record information on treatment chart, describing the conditions used in the simulation, to aid in their reproduction (e.g., patient position, technique and positioning devices) on the treatment machine.

04.0 OBSERVE THE CLINICAL PROGRESS OF THE PATIENT UNDERGOING RADIATION THERAPY; RECOGNIZE THE FIRST SIGNS OF ANY COMPLICATION; AND DETERMINE WHEN TREATMENT SHOULD BE WITHHELD UNTIL A PHYSICIAN MAY BE CONSULTED -- The student will be able to:

04.01 When requested, measure and record vital signs (blood pressure, respiratory rate, pulse rate and temperature).

04.02 Schedule patient for blood studies and record result (e.g., platelets, WBC, PVC, [HCT]) on treatment chart to provide record of effects of radiation on patient during course of treatment, and report abnormal results to physician.

04.03 Observe and/or question patient regarding nutritional status offering dietary hints or referring patient to appropriate personnel for management.
04.04 Observe and question patient about any side effects or problems he/she may be experiencing, and notify physician.

05.0 PROVIDE PATIENT CARE AND COMFORT ESSENTIAL TO RADIATION THERAPY PROCEDURES -- The student will be able to:

05.01 Answer patient's questions regarding treatment related topics or refer to the physician when inappropriate for the therapist to answer.
05.02 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen tanks) to avoid endangering the patient during the therapy procedure using knowledge of such hospital apparatus.
05.03 Educate patient concerning proper skin care of treatment area(s).
05.04 Recognize and report symptoms of abuse and neglect.

06.0 DETECT EQUIPMENT MALFUNCTIONS; REPORT SAME TO THE PROPER AUTHORITY, AND KNOW THE SAFE LIMITS OF EQUIPMENT OPERATION -- The student will be able to:

06.01 Warm up treatment machines and/or simulators and check all safety and operation procedures according to manufacturer's operating manual for possible malfunction.
06.02 Monitor console of treatment machine to spot any malfunctioning of equipment during treatment using indicators on machine, and take appropriate action when necessary to assure safety of patient and personnel.
06.03 Maintain treatment machines and accessories to minimize necessary interruptions in treatment due to mechanical breakdown.

07.0 APPLY THE RULES AND REGULATIONS FOR RADIATION SAFETY; DETECT ANY RADIATION HAZARDS; AND MAINTAIN CONTROL IN THE EVENT OF RADIATION ACCIDENT -- The student will be able to:

07.01 Wear a monitoring device while on duty to obtain a personal record of radiation exposure over a period of time.
07.02 Protect workers and others in the area from radiation exposure by closing door to treatment room to activate interlock.
07.03 Monitor patient visually (directly or indirectly) and by intercommunication system to insure patient's safety and accuracy of treatment.

08.0 UNDERSTAND THE FUNCTION OF EQUIPMENT AND UTILIZE EQUIPMENT TO ITS FULL POTENTIAL -- The student will be able to:

08.01 Position patient on simulator table in proper orientation to the simulator using positioning aids and immobilization devices.
08.02 Assist physician in localizing tumor volume and critical organs using radiographic techniques, with or without contrast media.
08.03 Process films to produce finished radiographs and have physician approve treatment (field) area indicated in film.

09.0 DEMONSTRATE THE USE OF ALL TREATMENT ACCESSORIES -- The student will be able to:

09.01 Assist physician in determining optimum fields to cover volume of interest utilizing knowledge of shape of field, gantry angle, blocks, et cetera.
09.02 Take contours of body parts for use in treatment planning using methods or materials such a solder wire, pin device, pantograph, CT, et cetera.
09.03 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen masks) to avoid endangering the patient during

procedure, using knowledge of such hospital apparatus.

10.0 CONSTRUCT IMMOBILIZATION AND BEAM DIRECTIONAL DEVICES AND PREPARE BRACHYTHERAPY MOLDS -- The student will be able to:

10.01 When procedure requires, manufacture individualized immobilization devices to aid in the replication of the treatment set-up (e.g., bite blocks, molds, plaster shells).
10.02 When appropriate, measure and record information necessary to fabricate blocks or accessories required for treatment.
10.03 Prepare custom blocks for use in shaping treatment field by cutting lead blocks or using molten metal techniques.

11.0 ASSIST IN THE PREPARATION OF BRACHYTHERAPY SOURCES -- The student will be able to:

11.01 Take placement radiographs of implants to be used in dose calculation and placement verification according to protocol.
11.02 Assist with measurement and recording of the necessary parameters for calculation of the dose to be delivered.
11.03 Assist with brachytherapy using knowledge of radionuclides employed and interstitial and intracavitary applications as integrated into the patient treatment plan.

12.0 ASSIST THE PHYSICIST IN CALIBRATION OF EQUIPMENT AND IN TREATMENT PLANNING PROCEDURES -- The student will be able to:

12.01 Check dose rate by measuring radiation dose reading at standard distance and standard conditions,, and then compare with proper standard using appropriate radiation measuring devices (e.g., Victoreen Timble Chamber).
12.02 Perform light field test on treatment machine to check alignment of collimator light and cross hairs with treatment beam by setting a standard field size, exposing a radiograph and physically measuring the field size recorded on the radiograph.
12.03 Check rotation by setting gantry so it goes through complete arc.

13.0 PARTICIPATE IN THE PATIENT FOLLOW UP PROGRAM AND IN RECORDING STATISTICAL DATA -- The student will be able to:

13.01 Assist physician with the physical examinations of patients (e.g., preparing patient, examination room, instruments).
13.02 Clean, wash, disinfect and/or sterilize facility and equipment, and dispose of contaminated items in preparation for next patient.
13.03 Apply infection control techniques following Center for Disease Control (CDC) guidelines.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when apply for a job.
14.04 Complete a job application correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate acceptable employee health habits.
14.10 Recognize the need for continuing education to up-date knowledge and skills.

15.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS

-- The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
15.02 Identify community resources and services available to the victims of immune-deficiency diseases.
15.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
15.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK — PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION — EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Radiography

CODE NUMBER: Secondary _______ Postsecondary ______

Florida CIP 0317.020900

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other _______________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as radiographers, (32917222), (078.362-026) or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The program must be approved by the Department of Health and Rehabilitative Services so that the graduate is eligible for licensure in Florida as a Certified Radiologic Technologist.

Radiographers provide patient services using imaging modalities, as directed by physicians qualified to order and/or perform radiologic procedures. Radiographers usually provide patient care essential to radiologic procedures, including exercising judgment when performing medical imaging procedures. When providing patient services, the radiographer adheres to the principles of radiation protection for the patient, self, and others.

Radiographers accurately demonstrate anatomical structures on various imaging receptors by knowledge of anatomy, positioning, radiographic technique, and radiation protection. Radiographers must also be able to recognize emergency patient conditions and initiate lifesaving first aid. Additional duties may include performing quality assurance, processing film, and keeping patient records. Radiographers may be required to perform some of these duties at the patient's bedside or in the operating room.

The content includes, but is not limited to, introduction to radiography, medical ethics and law, medical terminology, methods of patient care, human structure and function, radiographic procedures, principles of radiographic exposure, imaging equipment, radiographic film processing, evaluation of radiographs, radiation physics, principles of radiation protection, principles of radiation biology, radiographic pathology, introduction to quality assurance, introduction to computer literacy, and clinical education. The curriculum includes a plan for well-structured competency based clinical education.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Clinical education and laboratory activities shall be supervised and include a clinical education center that offers a sufficient and well-balanced variety of radiographic examinations and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principles and procedures of image quality, their evaluation and assurance, and radiation protection; a valid plan for clinical assignments and rotations; opportunities may be provided for elective clinical rotations.

The policies and process by which students receive clinical education shall be published and made known to all concerned in order to avoid practices in which students are substituted for paid staff. Students shall not take the responsibility or the place of qualified staff. After demonstrating competency, students may be permitted to perform procedures with indirect supervision. Unsatisfactory radiographs shall be repeated only in the presence of a qualified radiographer.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students are encouraged to become members of their appropriate professional organizations.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Apply knowledge of anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor.
02. Evaluate radiographic images for appropriate positioning and image quality.
03. Apply the principles of radiation protection for the patient, self and others.
04. Anticipate and provide patient care and comfort.
05. Recognize emergency patient conditions and initiate life saving first aid and basic life-support procedures.
06. Perform quality assurance procedures.
07. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
08. Demonstrate proper operation of radiographic equipment and accessories.
09. Demonstrate employability skills.
10. Demonstrate knowledge of immune-deficiency diseases, including HIV infection.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Radiography POSTSECONDARY NUMBER: 0317.020900

01.0 APPLY KNOWLEDGE OF ANATOMY, PHYSIOLOGY, POSITIONING AND RADIOGRAPHIC TECHNIQUES TO ACCURATELY DEMONSTRATE ANATOMICAL STRUCTURES ON A RADIOGRAPH OR OTHER IMAGING RECEPTOR -- The student will be able to:

01.01 Evaluate requisition for proper exam and/or patient.
01.02 Demonstrate knowledge of human anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor.
01.03 Position patient, utilizing body landmarks, to achieve the best demonstration of the affected body part by adjusting table, radiographic and/or fluoroscopic equipment, and image receptor using knowledge of anatomy, standard radiographic positions and departmental protocol.
01.04 To insure proper patient positioning during film exposure, use immobilization devices, when indicated, to prevent patient movement.
01.05 Give patient appropriate breathing instructions (e.g., inspiration, expiration) prior to making exposure.
01.06 When indicated, take scout radiograph(s) on trauma patients to determine the extent and nature of injury, and whether injury will permit standard examination procedures.
01.07 Remove all radiopaque materials (e.g., jewelry, hairpins, contrast materials) from patient and/or table that could interfere with the quality of the radiograph.

02.0 EVALUATE RADIOGRAPHIC IMAGES FOR APPROPRIATE POSITIONING AND IMAGE QUALITY -- The student will be able to:

02.01 Identify qualities that characterize a diagnostic radiograph.
02.02 Identify human structural landmarks and pathological conditions.
02.03 Identify incorrect image density, contrast, over/under exposures, artifacts, etc.
02.04 Recognize the effect of various patient conditions, equipment, accessories, and contrast media on radiographic quality.
02.05 Recognize legal, ethical, and professional responsibilities to patients, physicians, and co-workers.
02.06 Evaluate radiographic images for appropriate positioning and image quality.
02.07 If radiograph is not suitable, review procedural steps taken and modify as necessary.

03.0 APPLY THE PRINCIPLES OF RADIATION PROTECTION FOR THE PATIENT, SELF AND OTHERS -- The student will be able to:

03.01 Demonstrate knowledge of the principles of radiation protection for the patient, self and others.
03.02 Question female patients of child-bearing age about menstrual cycle and/or possible pregnancy to alert radiologist and/or referring physician.
03.03 When indicated place a gonadal shield over male and female reproductive organs prior to taking radiograph.
03.04 Stand behind lead barrier or wear a lead apron while activiting radiographic equipment.
03.05 Wear a monitoring device in the correct desugnated location while on duty to obtain a record of radiation exposure over a given period of time while operating radiographic equipment.
03.06 Place protective shield over radiosensitive organs (other than gonads) in or near the primary beam prior to exposure (ie: thyroid, eyes, etc.).

03.07 Remove all unnecessary persons from area prior to taking radiograph.
03.08 Restrict the beam to the area to be radiographed.
03.09 Explain the biological effects of ionizing radiation.

04.0 ANTICIPATE AND PROVIDE PATIENT CARE AND COMFORT -- The student will be able to:

04.01 Demonstrate knowledge required to anticipate and provide patient care and comfort.
04.02 Explain procedures to patient before beginning procedure.
04.03 Determine patients' identity using information on request form and confirm by checking wristband and/or by questioning patient.
04.04 Observe and/or question patient to determine if alternate radiographic projections are needed as well as any modifications that might be useful in the diagnosis.
04.05 Assist patient onto or off the table, stool or bed to avoid patient and personal injury using proper body mechanics and/or mechanical transfer devices.
04.06 Instruct patient about diet restrictions and/or self-administered preparatory medication or contrast agent relative to an examination.
04.07 Clean, wash, disinfect and/or sterilize facilities and equipment (e.g., cassettes, tabletops) and dispose of contaminated items prior to each patient to be radiographed.
04.08 Observe appropriate protective techniques when radiographing a patient in isolation to provide for effective infection control.
04.09 Use sterile and/or aseptic technique as required to help prevent infection.
04.10 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
04.11 Prior to injecting an iodinated contrast medium, elicit such information about the patient which might indicate a risk of a reaction using patient's chart, radiograph file jacket and/or by questioning patient.
04.12 Assist physician in the intravenous injection of contrast medium using appropriate aseptic technique.
04.13 After injection of iodinated constrast medium, observe patient to detect adverse reactions to the medium using knowledge of common reactions.
04.14 Introduce contrast medium (excluding intravenous injections) into patient according to procedure indicated by physician.
04.15 Recognize and report symptoms of abuse and neglect.

05.0 RECOGNIZE EMERGENCY PATIENT CONDITIONS AND INITIATE LIFE SAVING FIRST AID AND BASIC LIFE SUPPORT PROCEDURES -- The student will be able to:

05.01 Demonstrate the knowledge required to recognize emergency patient conditions and initiate life saving first aid and basic life support procedures.
05.02 Recognize the need for taking vital signs to assess changes in patient condition.
05.03 Recognize the need for medical attention and administer emergency treatment to patient during critical situation while waiting for help to arrive.
05.04 Monitor medical equipment to patient (e.g., IVs, oxygen masks) during the radiographic procedure, using knowledge of hospital equipment and procedures.

06.0 PERFORM QUALITY ASSURANCE PROCEDURES -- The student will be able to:

06.01 Demonstrate the knowledge required to perform basic quality assurance procedures.
06.02 Perform safety checks of radiographic equipment including table, tube and accessories.
06.03 Report malfunction in radiographic unit.

06.04 Clean screens and cassettes on a regular basis to remove dirt, paper or other artifacts.
06.05 Recognize and report malfunctions in the automatic processor.

07.0 EXERCISE INDEPENDENT JUDGMENT AND DISCRETION IN THE TECHNICAL PERFORMANCE OF MEDICAL IMAGING PROCEDURES -- The student will be able to:

07.01 Demonstrate the knowledge to exercise independent judgment and discretion in the technical performance of medical imaging procedures.
07.02 Select film, screen and/or grid combination appropriate for the part to be radiographed.
07.03 Restrict the beam to limit exposure to the area of interest to improve image quality.
07.04 Set appropriate kVp, mA and time for the radiographic unit to achieve optimal image quality and safe operating conditions.
07.05 Set appropriate kVp, mA, and time for the fluoroscopic and accessory imaging devices to achieve optimal image quality and safe operating conditions.

08.0 DEMONSTRATE PROPER OPERATION OF RADIOGRAPHIC EQUIPMENT AND ACCESSORIES -- The student will be able to:

08.01 Demonstrate the knowledge to properly operate radiographic equipment and accessories.
08.02 Warm-up x-ray tube to achieve proper operating conditions by following a prescribed sequence of steps.
08.03 Set appropriate kVp, mA and time (or if photo-timed, select appropriate kVp, mA, back-up time and photosensor) for the radiographic unit to achieve optimum image quality and safe operating conditions.
08.04 Utilize measuring calipers, technique charts and tube rating charts for selection of exposure factors.
08.05 Set appropriate kVp, mA, and time for the fluoroscopic and accessory imaging devices to achieve optimal image quality and safe operating conditions.
08.06 Store film in a manner which will reduce the possibility of accidentally exposing or re-exposing film.
08.07 Process film in a correct manner.
08.08 Reload cassettes by selecting film of proper size/type and place in designated area.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate acceptable employee health habits.
09.10 Recognize the need for continuing education to up-date knowledge and skills.

10.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
10.02 Identify community resources and services available to the

victims of immune-deficiency diseases.

10.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.

10.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK
PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION
EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Respiratory Care

CODE NUMBER: Secondary _______ Postsecondary _______

Florida CIP 0317.081800

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational ______ Other ______________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as respiratory care therapists (32302172) or to provide supplemental training for persons previously or currently employed in these occupations.

The respiratory therapist specializes in the application of scientific knowledge and theory to practical, clinical problems of respiratory care. The respiratory therapist is qualified to assume primary clinical responsibility for all respiratory care modalities, including responsibilities involved in supervision of respiratory therapy technician functions.

The respiratory therapist may be required to exercise considerable independent, clinical judgment in the respiratory care of patients under the direct or indirect supervision of a physician. Further, the therapist is capable of serving as a technical resource person to the physician with regard to current practices in respiratory care, and to the hospital staff as to effective and safe methods for administering respiratory therapy.

The respiratory therapist's scope of patient care in an institution or home environment includes, but is not limited to, quality control of all units, intermittent positive pressure breathing (IPPB); humidity/aerosol therapy; medical gas administration; broncho-pulmonary drainage; mechanical ventilation; airway management; emergency care; pulmonary function testing; cardiorespiratory rehabilitation; measurement and reporting of cardiopulmonary sampling, infection control; cardiorespiratory drug administration and physiologic monitoring.

Content includes biological and physical sciences basic to understanding the functioning of the cardiopulmonary system, such as anatomy, physiology, medical terminology, chemistry, mathematics, microbiology, physics, therapeutic/diagnostic procedures, clinical medicine and patient assessment. The instruction is more extensive for the respiratory therapist than for the respiratory therapy technician. The program of study also includes social sciences basic to understanding how to relate with patients and includes topics such as psychology, communication skills and medical ethics. Clinical training in routine and special procedures applicable to neonatal, pediatric, adult, geriatric patients and those with varying degrees of cardiopulmonary impairment are also provided. The content also includes computer science.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through classroom instruction and applied laboratory procedures or practice.

II. LABORATORY/CLINICAL ACTIVITIES: Clinical education and laboratory activities shall be supervised and should include the following: a clinical education center that offers a sufficient and well-balanced variety of respiratory therapy procedures and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principles and procedures of respiratory care, their evaluation and assurance, and a valid plan for clinical assignments and rotations.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. Student membership in the Florida Society for Respiratory Care and the American Association for Respiratory Care is encouraged. The program should also provide Basic Cardiac Life Support certification.

The program must be accredited by the American Medical Association Committee on Allied Health Education and Accreditation. Program compliance with the essentials and guidelines are monitored by the Joint Review Committee for Respiratory Therapy Education. State credentialling will be done in accordance with Chapter 468 F.S.

The typical length of this program for an average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Select, review, obtain, and interpret patient data.
02. Select, assemble, and check equipment for proper function, operation, cleanliness, and calibration.
03. Initiate and conduct therapeutic procedures: recognize when prescribed therapeutic procedure is inappropriate, and follow proper protocol for notification.
04. Maintain records and communications.
05. Perform cardiorespiratory diagnostic testing, including pulmonary function testing.
06. Draw arterial and mixed venous blood samples and analyze blood gases and hemoglobin values.
07. Perform mechanical ventilation.
08. Perform infection control techniques.
09. Perform cleaning, sterilization, and general maintenance of equipment.
10. Instruct patient in cardiorespiratory rehabilitation.
11. Demonstrate employability skills.
12. Adapt appropriate respiratory care procedures to the home care environment.
13. Perform advanced respiratory care procedures.
14. Administer cardiorespiratory drugs.
15. Assistant the physician with special respiratory therapy procedures.
16. Demonstrate leadership and supervisory skills.
17. Demonstrate knowledge of immune deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS

PROGRAM AREA: Health Occupations

PROGRAM TITLE: Respiratory Care

EFFECTIVE DATE: July, 1993

SECONDARY NUMBER: ______

POSTSECONDARY NUMBER: 0317.081800

01.0 SELECT, REVIEW, OBTAIN AND INTERPRET PATIENT DATA -- The student will be able to:

01.01 Review existing data in patient record.
01.02 Collect and evaluate additional pertinent clinical information by assessing patient's overall cardiorespiratory status including inspection, palpation, percussion, auscultation and vital signs.
01.03 Collect and evaluate additional pertinent clinical information by inspection of chest x-ray and review of ABG's.
01.04 Perform and evaluate bedside pulmonary assessment and procedures (Vt, FVC, NIF, etc.).
01.05 Interview and evaluate patient's current medical status.
01.06 Recommend and/or obtain additional pertinent data based on patient assessment.
01.07 Perform and evaluate appropriate cardiorespiratory tests including EKG.
01.08 Determine appropriateness of prescribed respiratory care plan and recommend modification where indicated.
01.09 Participate in development of respiratory care plan.

02.0 SELECT, ASSEMBLE, AND CHECK EQUIPMENT FOR PROPER FUNCTION, OPERATION CLEANLINESS AND CALIBRATION -- The student will be able to:

02.01 Select suitable equipment from available supply appropriate to respiratory care plan.
02.02 Assemble parts, check for completeness, condition, cleanliness, and calbration .
02.03 Check calibration and operation of device and correct malfunctions or send for repair (quality control).
02.04 Clean and disinfect used equipment, wrap and sterilize using appropriate method (gas, temperature, chemical), and following Center for Disease Control (CDC) guidelines.
02.05 Store equipment, transport equipment and identify gases.
02.06 Maintain inventory and monitor oxygen storage systems and change a cylinder bank.
02.07 Transport high pressure cylinders, check dates and pressure.

03.0 INITIATE AND CONDUCT THERAPEUTIC PROCEDURES; RECOGNIZE WHEN PRESCRIBED THERAPEUTIC PROCEDURE IS INAPPROPRIATE AND FOLLOW PROPER PROTOCOL FOR NOTIFICATION -- The student will be able to:

03.01 Explain planned therapy and goals to patients in nontechnical understandable terms to achieve optimal therapeutic outcome.
03.02 Protect patient from nosocomial infection by adherence to infection control policies and procedures.
03.03 Conduct prescribed therapeutic procedures to achieve the maintenance of a patent airway, including the care of artificial airways.
03.04 Perform sterile suctioning technique of endotrocheal tube and nasopharyngeal/oropharyngeal airway (for secretion removal).
03.05 Conduct prescribed therapeutic procedures to achieve the removal of bronchopulmonary secretions, including the preparation of specimens for analysis.
03.06 Conduct prescribed therapeutic procedures to achieve adequate spontaneous and mechanical ventilation.
03.07 Conduct prescribed therapeutic procedures to achieve adequate arterial and tissue oxygenation, including CPAP and or special therapuetic gases.
03.08 Evaluate and monitor prescribed respiratory therapy and patients response to therapy.

03.09 Make necessary recommendation for modification in therapeutic procedures based on patient's response and/or appropriate laboratory data, following proper protocol.

03.10 Recommend modification in the respiratory care prescription based on the patient's response.

03.11 Initiate and conduct pulmonary rehabilitation and home care.

03.12 Terminate treatments based on patient's adverse reaction to any type of therapy being administered.

03.13 Modify treatment techniques within the prescription.

03.14 Verify computations and note erroneous data.

03.15 Initiate, conduct and modify prescribed therapy

03.16 Initiate and provide emergency resusciation.

03.17 Perform cardiopulmonary resuscitation on an infant patient.

03.18 Perform cardiopulmonary resuscitation on a child.

03.19 Perform one rescuer cardiopulmonary resuscitation on an adult patient.

03.20 Perform two rescuer cardiopulmonary resuscitation on an adult patient.

03.21 Perform obstructed airway maneuver on an unconscious adult patient.

03.22 Perform obstructed airway maneuver on a conscious adult patient.

03.23 Set up, assist with, and perform oral intubation on an unconscious adult patient or model.

03.24 Ventilate patient with a manual resuscitator with mask.

03.25 Ventilate patient with demand valve unit with mask.

03.26 Add an intermittent mandatory ventilation setup with reservoir bag to a ventilator circuit.

03.27 Add positive end expiratory pressure (PEEP) to ventilator circuit.

03.28 Perform extubation of adult patient.

03.29 Monitor return to normal physiology, reintubate if necessary.

04.0 MAINTIAN RECORDS AND COMMUNICATIONS -- The student will be able to:

04.01 Use computer system to access and input patient data, when appropriate.

04.02 Chart on medical record: record therapy and results using conventional terminology as required by hospital policy and regulatory agencies.

04.03 Be familiar with and use departmental policy and procedure manual; actively participate in recommending updates.

04.04 Consistently display a professional and positive attitude in all communications.

04.05 Display respect for patients regardless of race, religion, color, creed, sex, age or diagnosis.

04.06 Maintain confidentiality of all patient records and information.

05.0 PERFORM CARDIORESPIRATORY DIAGNOSTIC TESTING, INCLUDING PULMONARY FUNCTION TESTING -- The student will be able to:

05.01 Obtain pulmonary history.

05.02 Perform simple spirometry maneuvers, including tidal volume, minute volume, and vital capacity.

05.03 Compute patient normal values.

05.04 Recognize normal vs. abnormal results.

05.05 Measure lung volumes and capacities.

05.06 Perform diffusion studies.

05.07 Perform gas distribution tests.

05.08 Perform and evaluate cardiovascular monitoring.

06.0 DRAW ARTERIAL AND MIXED VENOUS BLOOD SAMPLES AND ANALYZE BLOOD GASES AND HEMOGLOGIN VALUES -- The student will be able to:

06.01 Obtain appropriate equipment.

06.02 Maintain quality control on blood gas analyzer and co-oximeter.

06.03 Identify patient, introduce self, explain procedure.

06.04 Perform Allen test or other technique to assess collateral

circulation..
06.05 Wash hands, prepare and collect sample from appropriate site, place in ice slush.
06.06 Apply pressure for required time when appropriate.
06.07 Place blood sample into the blood gas analyzer/co-oximeter, according to manufacturers directions.
06.08 Perform entire procedure following Center for Disease Control (CDC) guidelines, and taking universal precautions.

07.0 PERFORM MECHANICAL VENTILATION -- The student will be able to:

07.01 Recognize indications for ventilation, verfying physician's order as necessary.
07.02 Select correct type and/or mode of ventilation.
07.03 Determine that ventilator is functioning safely and properly.
07.04 Connect mechanical ventilator to patient.
07.05 Monitor patient physiology and make appropriate ventilator changes if necessary.
07.06 Address needs of the patient, including psychological, physical, and emotional.
07.07 Recognize indications for adjunctive airway maneuvers.
07.08 Determine patient's readiness for weaning.
07.09 Wean patient from ventilator.
07.10 Monitor patient's return to normal physiology; reventilate if necessary.

08.0 PERFORM INFECTION CONTROL TECHNIQUES -- The student will be able to:

08.01 Apply infection control techniques following Center for Disease Control (CDC) guidelines, and taking universal precautions.
08.02 Don isolation cap, mask, gown and gloves.
08.03 Perform prescribed therapy in an isolation setting.
08.04 Discard/double bag used equipment.
09.05 List the types of isolation with the required apparel/procedures, etc.
08.06 Chart activity related to isolation setting.

09.0 PERFORM CLEANING, STERILIZATION, AND GENERAL MAINTENANCE OF EQUIPMENT -- The student will be able to:

09.01 Maintain a use record on special equipment.
09.02 Maintain equipment maintenance records.
09.03 Maintain preventive maintenance records.
09.04 Clean used equipment, wrap and sterilize, using appropriate method (gas, temperature, chemical).
09.05 Operate sterilizer if applicable or send to central service.
09.06 Store returned sterilized equipment safely being mindful of sterilization expiration dates.
09.07 Perform routine maintenance according to manufacturer's directions.

10.0 INSTRUCT PATIENT IN CARDIORESPIRATORY REHABILITATION -- The student will be able to:

10.01 Instruct patient and family in equipment cleaning care and use.
10.02 Instruct patient and family in proper breathing/coughing exercises.
10.03 Instruct patient and family in physical exercise, and in activities of daily living.
10.04 Instruct patient and family about the disease state.
10.05 Instruct patient and family about when to call the physician.
10.06 Instruct patient and family in how to recognize deterioration in physical status.
10.07 Instruct patient and family in proper drug dosage and administration techniques and importance of the therapy.
10.08 Instruct patient and family in proper therapy techniques.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.
11.10 Identify state licensure and continuing education requirements.

12.0 ADAPT APPROPRIATE RESPIRATORY CARE PROCEDURES TO THE HOME CARE ENVIRONMENT -- The student will be able to:

12.01 Provide for O2 administration, aerosal and bronchial hygiene therapy and lung expansion therapy in the home.
12.02 Arrange for life support and monitoring (i.e mechanical ventilation, apnea monitoring, nasal CPAP) in the home.
12.03 Instruct patient, family and other health care workers on the appropriate use, operation, cleaning and maintenance of respiratory care equipment.
12.04 Perform patient monitoring and assessment in the home.
12.05 Recognize and report symptoms of abuse and neglect.

13.0 PERFORM ADVANCED RESPIRATORY CARE PROCEDURES -- The student will be able to:

13.01 Assume primary clinical responsibility for all respiratory care modalities.
13.02 Check physicians orders or consult with physician.
13.03 Design and implement respiratory care plan as appropriate.
13.04 Perform pulmonary artery sampling.
13.05 Perform cardiac output procedures.
13.06 Perform arterial line set up and monitoring.
13.07 Perform transcutaneous gas monitoring.
13.08 Perform non invasive monitoring techniques as appropriate.
13.09 Perform pulseoximetry monitoring.
13.10 Perform various advanced procedures, based on local practice.
13.11 Remove, clean and replace inner canula tube nad/or replace tracheostomy tube, as ordered.
13.12 Perform various mathematical computations dealing with cardiopulmonary assessment.
13.13 Intubate infant.
13.14 Initiate infant mechanical ventilation with appropriate ventilator and parameter including CPAP and PEEP.
13.15 Extubate infant, within recommended criteria.
13.16 Monitor return to normal physiology; reventilate if necessary.

14.0 ADMINISTER CARDIORESPIRATORY DRUGS -- The student will be able to:

14.01 Demonstrate knowledge of drug classifications, actions and uses, route of administration and usual adult doses, mathematics needed to calculate divided or childrens dosage, contraindications, drug interactions, adverse reactions, how supplied, mixing instructions, storage, laboratory test interferences.
14.02 Recognize the critical importance of this activity and follow directions.
14.03 Verify physicians orders.
14.04 Prepare medication for administration.
14.05 Identify patient, introduce self.
14.06 Administer drug.
14.07 Document administering of drug in all appropriate records.
14.08 Recognize the symptoms of drug idiosyncracies.

14.09 Identify adverse drug reactions and take appropriate action.
14.10 Recognize anaphylactic shock.

15.0 ASSIST THE PHYSICIAN WITH SPECIAL RESPIRATORY THERAPY PROCEDURES -- The student will be able to:

15.01 Assist with insertion and maintenance of an umbilical arterial and/or venous catheter.
15.02 Assist with bronchoscopy, chest tubes, cardiac catheterizations.
15.03 Assist with Swan-Ganz catherization and other invasive monitoring.
15.04 Assist with thoracentesis and tracheostomy.

16.0 SUPERVISE SKILLS -- The student will be able to:

16.01 Perform evaluations of subordinate personnel, maintaining objectivity.
16.02 Make assignments to appropriate personnel within the department.
16.03 Observe employee behavior and counsel re attitudes, demeanor, appearance, protocol, interaction.
16.04 Encourage/provide continuing education activities.
16.05 Observe subordinate performing procedures, correct discrepancies.
16.06 Instruct subordinates in new procedures/new equipment.
16.07 Demonstrate knowledge of productivity and control of resources, using budgeting, inventory control, and ordering of supplies.
16.08 Recognize state-required licensure and documentation (i.e., experiential and public display).

17.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

17.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
17.02 Identify community resources and services available to the victims of immune-deficiency diseases.
17.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
17.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to patients, following Centers for Disease Control (CDC) guidelines.
17.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Respiratory Care Technician

CODE NUMBER: Secondary ______ Postsecondary H170819

Florida CIP 0317.081900

SECONDARY SCHOOL CREDITS ____ COLLEGE CREDITS ____ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____7-9 ____9-12 X Postsecondary Adult Vocational

____ Postsecondary Vocational ____ Other 30, 31

CERTIFICATION COVERAGE: RESP THER @ 7 G RESP TEC @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as respiratory care technician, respiratory therapy technician, or to provide supplemental training for persons previously or currently employed in this occupation.

The respiratory therapy technician specializes in the technical details of general respiratory therapeutics. Technicians may assume clinical responsibility for specified respiratory care modalities involving the application of well defined therapeutic techniques under the direct or indirect supervision of a therapist or physician.

The respiratory technician's role does require the exercising of independent, clinical judgment; however, the technician is expected to adjust or modify therapeutic techniques within well-defined procedures and based on a limited range of patient responses. Therefore, the effective use of the technician, especially in the critical care setting, requires that a respiratory therapist or a physician be available for consultation.

The respiratory therapy technician's scope of patient care includes, but is not limited to the following respiratory care modalities under direct or indirect supervision by a therapist or physician: intermittent positive pressure breathing (IPPB); humidity/aerosol therapy; including the administration of aerosolized medicants under physician prescription; medical gas therapy; pulmonary drainage procedures; and cardiopulmonary resuscitation; pulmonary function testing; drawing/analyzing arterial and venous blood gases, and airway management. Further the technician may perform continuous ventilation, cleaning, sterilization, infection control, cardiorespiratory rehabilitation, and general maintenance of equipment.

The content includes, but is not limited to, biological and physical sciences basic to understanding the functioning of the cardiopulmonary systems, such as anatomy, physiology, medical terminology, chemistry, mathematics, microbiology, physics, therapeutic procedures, clinical medicine, and clinical experiences. Clinical training in routine and special procedures applicable to neonatal, pediatric, adult, and geriatric patients is also provided. The program of study also includes social sciences basic to understanding how to relate with patients and includes topics such as psychology, communication skills, and medical ethics. The content also includes computer science.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY/CLINICAL ACTIVITIES: Clinical education and laboratory activities shall be supervised and should include the following: a clinical education center that offers a sufficient and well-balanced variety of respiratory therapy examinations and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principlesand procedures of respiratory care, their evaluation and assurance,and a valid plan for clinical assignments and rotations.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Student membership in both the American Association for Respiratory Care and the Florida Society for Respiratory Care is encouraged.

The program must be approved by the American Medical Association, Committee on Allied Health Education and Accreditation. Program compliance with the essentials and guidelines are monitored by the Joint Review Committee for Respiratory Therapy Education.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed under the cooperative method of instruction.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is approximately 12 months.

IV. INTENDED OUTCOMES: After successfully completing this program, the graduate will be able to:

01. Select, review, obtain, and interpret patient data.
02. Select, assemble, and check equipment for proper function, operation, cleanliness, and calibration.
03. Initiate and conduct therapeutic procedures; recognize when prescribed therapeutic procedure is appropriate, and follow proper protocol for notification.
04. Maintain records and communications.
05. Perform pulmonary function testing.
06. Draw arterial and venous blood samples and analyze blood gases and hemoglobin values.
07. Perform mechanical ventilation.

08. Perform infection control techniques.
09. Perform cleaning, sterilization, and general maintenance of equipment.
10. Instruct patient in cardiorespiratory rehabilitation and home care.
11. Demonstrate employability skills.
12. Administer cardiorespiratory drugs.
13. Assist a physician performing special procedures, as appropriate.
14. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS
EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations
SECONDARY NUMBER: ______

PROGRAM TITLE: Respiratory Care Technician
POSTSECONDARY NUMBER: H170819

01.0 SELECT, REVIEW, OBTAIN AND INTERPRET PATIENT DATA -- The student will be able to:

01.01 Review existing data in patient record.
01.02 Collect and evaluate additional pertinent clinical information by assessing patient's overall cardiorespiratory status, including inspection, palpation, percussion, auscultation and vital signs.
01.03 Collect and evaluate additional pertinent clinical information by inspection of chest x-ray and review of ABG's.
01.04 Perform and evaluate bedside pulmonary assessment and procedures (Vt, FVC, NIF, etc.).
01.05 Interview and evaluate patient's current medical status.
01.06 Recommend and/or obtain additonal pertinent data based on patient assessment.
01.07 Perform and evaluate appropriate cardiorespiratory tests.
01.08 Determine appropriateness of prescribed respiratory care plan and recommend modification where indicated.
01.09 Participate in development of respiratory care plan.

02.0 SELECT, ASSEMBLE, AND CHECK EQUIPMENT FOR PROPER FUNCTION, OPERATION CLEANLINESS, AND CALIBRATION -- The student will be able to:

02.01 Select suitable equipment from available supply appropriate to respiratory care plan.
02.02 Assemble parts, check for completeness, condition, cleanliness, and calibration.
02.03 Check calibration and operation of device and correct malfunctions or send for repair (quality control).
02.04 Clean, disinfect, wrap, and sterilize equipment using appropriate method (gas, temperature, chemical), and following Center for Disease Control (CDC) guidelines.
02.05 Maintain, store, and transport equipment and identify gases.
02.06 Maintain and monitor oxygen storage systems and cylinder banks.

03.0 INITIATE AND CONDUCT THERAPEUTIC PROCEDURES; RECOGNIZE WHEN PRESCRIBED THERAPEUTIC PROCEDURE IS INAPPROPRIATE, AND FOLLOW PROPER PROTOCOL FOR NOTIFICATION -- The student will be able to:

03.01 Explain planned therapy and goals to patients in nontechnical understandable terms to achieve optimal therapeutic outcome.
03.02 Protect patient from nosocomial infection by adherence to infection control policies and procedures.
03.03 Conduct prescribed therapeutic procedures to achieve the maintenance of a patent airway, including the care of artificial airways.
03.04 Perform sterile suctioning technique of endotracheal tube and nasopharyngeal/oropharyngeal airway (for secretion removal).
03.05 Conduct prescribed therapeutic procedures to achieve the removal of bronchopulmonary secretions, including the preparation of specimens for analysis.
03.06 Conduct prescribed therapeutic procedures to achieve adequate spontaneous and mechanical ventilation.
03.07 Conduct prescribed therapeutic procedures to achieve adequate arterial and tissue oxygenation, including CPAP and/or special therapeutic gases.
03.08 Evaluate and monitor prescribed respiratory therapy and patient's response to therapy.
03.09 Initiate, conduct, and modify prescribed therapy based on

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patient's response and/or appropriate laboratory data within the limitations of the prescription.

03.10 Initiate and conduct pulmonary rehabilitation and home care.

03.11 Terminate treatments based on patient's adverse reaction to any type of therapy being administered.

03.12 Perform and verify required computations and note erroneous data.

03.13 Initiate and provide emergency resuscitation.

03.14 Perform cardiopulmonary resuscitation on an infant patient.

03.15 Perform cardiopulmonary resuscitation on a child.

03.16 Perform one rescuer cardiopulmonary resuscitation on an adult patient.

03.17 Perform two rescuer cardiopulmonary resuscitation on an adult patient.

03.18 Perform obstructed airway maneuver on an unconscious adult patient.

03.19 Perform obstructed airway maneuver on a conscious adult patient.

03.20 Set up, assist with, and perform oral intubation on an unconscious adult patient, or model.

03.21 Ventilate patient with a manual resuscitator with mask.

03.22 Ventilate patient with demand valve unit with mask.

03.23 Add an intermittent mandatory ventilation setup to a ventilator circuit.

03.24 Add positive end expiratory pressure (PEEP) to ventilator circuit.

03.25 Perform extubation of adult patient.

03.26 Monitor return to normal physiology; reintubate if necessary.

04.0 MAINTAIN RECORDS AND COMMUNICATIONS -- The student will be able to:

04.01 Use computer system to access and input patient data, as appropriate.

04.02 Chart on medical record: record therapy and results using conventional terminology as required by hospital policy and regulatory agencies.

04.03 Utilize departmental policy manual.

04.04 Consistently display a professional and positive attitude in all communications.

04.05 Display respect for patients regardless of race, religion, color, creed, sex, age or diagnosis.

04.06 Maintain confidentiality of all patient records and information.

05.0 PERFORM PULMONARY FUNCTION TESTING -- The student will be able to:

05.01 Obtain pulmonary history.

05.02 Perform simple spirometry maneuvers, including tidal volume, minute volume, and vital capacity.

05.03 Compute patient normal values.

05.04 Recognize normal vs. abnormal results.

05.05 Measure lung volumes and capacities.

05.06 Perform diffusion studies.

05.07 Perform gas distribution tests.

06.0 DRAW ARTERIAL AND VENOUS BLOOD SAMPLES AND ANALYZE BLOOD GASES AND HEMOGLOBIN VALUES -- The student will be able to:

06.01 Obtain appropriate equipment.

06.02 Maintain quality control on blood gas analyzer and co-oximeter.

06.03 Identify patient, introduce self, explain procedure.

06.04 Perform Allen test or other technique to assess collateral circulation; analyze result.

06.05 Wash hands, prepare and collect sample from appropriate site, place in ice slush.

06.06 Apply pressure for required time.

06.07 Place blood sample into the blood gas analyzer/co-oximeter according to manufacturers directions.

06.08 Perform entire procedure following Center for Disease Control

(CDC) guidelines, and taking universal precautions.

07.0 PERFORM MECHANICAL VENTILATION -- The student will be able to:

07.01 Recognize indications for ventilation, verifying physician's order as necessary.
07.02 Select correct type and/or mode of ventilation.
07.03 Determine that ventilator is functioning safely and properly.
07.04 Connect mechanical ventilator to patient.
07.05 Monitor patient physiology and make appropriate ventilator changes if necessary.
07.06 Address needs of the patient, including psychological, physical, and emotional.
07.07 Recognize indications for adjuctive airway maneuvers.
07.08 Determine patient's readiness for weaning.
07.09 Wean patient from ventilator.
07.10 Monitor patient's return tonormal physiology; reventilate if necessary.

08.0 PERFORM INFECTION CONTROL TECHNIQUES -- The student will be able to:

08.01 Apply infection control techniques following Center for Disease Control (CDC) guidelines, and taking universal precautions.
08.02 Don isolation cap, mask, gown and gloves.
08.03 Perform prescribed therapy in an isolation setting.
08.04 Discard/double bag used equipment and arrange for proper sterilization or disposal.
08.05 List the types of isolation with the required apparel/procedures, etc.
08.06 Chart activity related to isolation setting.

09.0 PERFORM CLEANING, STERILIZATION, AND GENERAL MAINTENANCE OF EQUIPMENT -- The student will be able to:

09.01 Clean used equipment, wrap and sterilze, using appropriate method (gas, temperature, chemical).
09.02 Operate sterilizer if applicable or send to central service.
09.03 Store returned sterilized equipment safely, being mindful of sterilization expiration dates.
09.04 Perform routine maintenance according to manufacturer's directions and maintain appropriate maintenance records..

10.0 INSTRUCT PATIENT IN CARDIORESPIRATORY REHABILITATION AND HOME CARE -- The student will be able to:

10.01 Instruct patient and family in equipment cleaning, care and use.
10.02 Instruct patient and family in proper breathing/coughing exercises.
10.03 Instruct patient and family in physical exercise, and in activities of daily living.
10.04 Instruct patient and family about the disease state.
10.05 Instruct patient and family about when to call the physician.
10.06 Instruct patient and family in how to recognize deterioration in physical status.
10.07 Instruct patient and family in proper drug dosage and administration techniques and importance of the therapy.
10.08 Instruct patient and family in proper therapy techniques.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

11.07 Identify acceptable work habits.

11.08 Demonstrate knowledge of how to make job changes appropriately.

11.09 Demonstrate acceptable employee health habits.

11.10 Identify state licensure and continuing education requirements.

12.0 ADMINISTER CARDIORESPIRATORY DRUGS -- The student will be able to:

12.01 Demonstrate knowledge of drug classifications, actions and uses, route of administration and usual adult doses, mathematics needed to calculate divided or childrens dosage, contraindications, drug interactions, adverse reactions, how supplied, mixing instructions, storage, laboratory test interferences.

12.02 Recognize the critical importance of this activity and follow directions.

12.03 Verify physicians orders.

12.04 Prepare medication for administration.

12.05 Identify patient, introduce self.

12.06 Administer drug.

12.07 Document administering of drug in all appropriate records.

12.08 Recognize the symptoms of drug idiosyncracies.

12.09 Identify adverse drug reactions and take appropriate action.

12.10 Recognize anaphylactic shock.

13.0 ASSIST PHYSICIAN PERFORMING SPECIAL PROCEDURES, AS APPROPRIATE -- The student will be able to:

13.01 Assist the physician performing a bronchoscopy, as appropriate.

13.02 Assist the physician performing a thoracentesis, as appropriate.

13.03 Assist the physician performing a tracheostomy, as appropriate.

13.04 Assist the physician performing insertion of chest tubes, as appropriate.

13.05 Assist the physician performing invasive monitoring.

14.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

14.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.

14.02 Identify community resources and services available to the victims of immune-deficiency diseases.

14.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.

14.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

14.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Surgical Technology

CODE NUMBER: Secondary ______ Postsecondary STS0800

Florida CIP 0317.021100

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS ______ POSTSECONDARY ADULT VOCATIONAL CREDITS X

APPLICABLE LEVEL(S): ____7-9 ____9-12 X Postsecondary Adult Vocational

______ Postsecondary Vocational X Other 30, 31

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE @7 G OPR RM TEC @7 G

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as surgical technicians (32928223) or to provide supplemental training for persons previously or currently employed in these occupations. Selected portions of this program may be utilized to provide additional skills to enable nursing graduates to become employable in operating rooms as surgical technologists. The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation, CAHEA.

The content includes, but is not limited to, communication and interpersonal skills, legal and ethical responsibilities, anatomy, physiology, pathophysiology, microbiology, aseptic techniques, patient care procedures, surgical technology procedures, patient safety, use and care of equipment and supplies, CPR, Heartsaver, employability skills, and basic computer literacy.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: In a simulated surgical environment, students practice preparing, setting up and maintaining a sterile field, sterilization and disinfection procedures, preparation of supplies and equipment for surgery, and patient preparation.

Clinical learning experiences in an operating room and related areas are an integral part of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. Students should be encouraged to belong to their professional association.

A low teacher-student ratio in the clinical area is strongly recommended. The recommended maximum ratio of 1:12.

After successful completion of an approved program, students are eligible to take the Association of Surgical Technologists National Certification Examination.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for an average achieving student is 1200 hours.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate communication and interpersonal skills.
02. Demonstrate an understanding of legal and ethical responsibilities.
03. Demonstrate an understanding of the basic sciences related to surgical technology.
04. Describe and practice safety measures in the surgical environment.
05. Perform patient care procedures related to the surgical environment and describe methods for meeting patients' needs.
06. Demonstrate knowledge of the skills necessary to function safely and effectively.
07. Demonstrate knowledge of and assist with surgical procedures.
08. Demonstrate employability skills.
09. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: _______

PROGRAM TITLE: Surgical Technology POSTSECONDARY NUMBER: STS0800

01.0 DEMONSTRATE COMMUNICATION AND INTERPERSONAL SKILLS -- The student will be able to:

01.01 Demonstrate use of the intercom.
01.02 Demonstrate proper telephone usage.
01.03 Demonstrate basic computer literacy.
01.04 Demonstrate ability to interact with patients.
01.05 Demonstrate effective teamwork as a member of the surgical team.

02.0 DEMONSTRATE AN UNDERSTANDING OF LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

02.01 Explain Patients Bill of Rights.
02.02 State methods, standards and aids that assist a surgical technologist with interpreting and following legal responsibilities.
02.03 Explain the job requirements.
02.04 Provide health care within the ethical/legal framework of his/her job description.

03.0 DEMONSTRATE AN UNDERSTANDING OF THE BASIC SCIENCES RELATED TO SURGICAL TECHNOLOGY -- The student will be able to:

03.01 Explain microbiology and its relationship to the surgical environment.
03.02 Demonstrate knowledge of medical/surgical terminology.
03.03 Relate anatomy and physiology to surgical procedures.
03.04 Apply the principles of surgical asepsis.
03.05 Apply infection control techniques following Center for Disease Control (CDC) guidelines.

04.0 DESCRIBE AND PRACTICE SAFETY MEASURES IN THE SURGICAL ENVIRONMENT -- The student will be able to:

04.01 Inspect emergency equipment and supplies for condition and quantity.
04.02 Identify and report/correct unsafe conditions.
04.03 Identify and report, to designated personnel, conditions which may exist that could negatively affect the health, safety and well being of the patient or personnel.
04.04 Check electrical equipment in the operating room.
04.05 Demonstrate correct body mechanics.
04.06 Obtain CPR certification.
04.07 Identify appropriate safety measures for laser surgery.

05.0 PERFORM PATIENT CARE PROCEDURES RELATED TO THE SURGICAL ENVIRONMENT AND DESCRIBE METHODS FOR MEETING PATIENT'S NEEDS -- The student will be able to:

05.01 Perform patient transfer/transportation techniques.
05.02 Take and record temperature, pulse, respiration, and blood pressure.
05.03 Assist with positioning and restraining patient for surgery.
05.04 Ground patient and connect electro surgical cautery unit.
05.05 Identify the roles of anesthetist and circulating nurse during induction.
05.06 Prepare operative site.
05.07 Identify steps for foley catheter insertion and connecting to drainage.
05.08 Assist in applying sterile dressing and bandage.

06.0 DEMONSTRATE KNOWLEDGE OF THE SKILLS NECESSARY TO FUNCTION SAFELY AND EFFECTIVELY -- The student will be able to:

06.01 Select instruments, equipment and supplies for surgical procedures using surgeon preference cards/procedure cards.
06.02 Measure and pour sterile solutions.
06.03 Perform surgical scrub.
06.04 Put on sterile gown and gloves.
06.05 Drape tables and solution stands.
06.06 Set up sterile mayo stand and instrument table.
06.07 Prepare sutures, ligatures, ties.
06.08 Assist surgeon in gowning and gloving.
06.09 Assist in draping patient, pass instruments, monitor field.
06.10 Identify/correct and/or report breaks in aseptic technique.
06.11 Monitor body fluids, e.g. blood loss, ascites.
06.12 Perform complete counts with R.N..
06.13 Identify principles and demonstrate techniques of disinfection and sterilization.
06.14 Assist in removing/applying cast.
06.15 Prepare specimen for laboratory analysis.
06.16 Decontaminate instruments equipment and environment.
06.17 Replenish supplies and equipment.
06.18 Prepare and/or update procedure cards.

07.0 DEMONSTRATE KNOWLEDGE OF AND ASSIST WITH SURGICAL PROCEDURES -- The student will be able to:

07.01 Identify preoperative diagnosis, common complications, operative pathology relating to specific surgical procedures.
07.02 List and describe types of incisions and wound closures.
07.03 Identify instruments, equipment and supplies for any surgical procedure.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

08.01 Conduct a job search.
08.02 Secure information about a job.
08.03 Identify documents that may be required when applying for a job.
08.04 Complete a job application.
08.05 Demonstrate competence in job interview techniques.
08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
08.07 Identify acceptable work habits.
08.08 Demonstrate knowledge of how to make job changes appropriately.
08.09 Demonstrate acceptable employee health habits.
08.10 Recognize the need for continuing education to up-date knowledge and skills.

09.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

09.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases, including HIV infection.
09.02 Identify community resources and services available to the victims of immune-deficiency diseases.
09.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
09.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
09.05 Demonstrate knowledge of the legal aspects of AIDS.

CURRICULUM FRAMEWORK — PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION — EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Veterinary Technology

CODE NUMBER: Secondary ______ Postsecondary ______

Florida CIP 0317.051200

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS x POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

x Postsecondary Vocational _____ Other ___________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as veterinary technicians (79017501) (the preferred terminology), animal caretaker (410.674-010), animal health technicians, or animal laboratory technicians. They assist veterinarians in the medical care of animals, and typically supervise animal attendants, ward attendants, animal handlers, veterinary assistants and other employees of veterinarians. A clear distinction needs to be made between graduates of a two year A.S. degree program (veterinary technicians), and veterinary assistants who learn on the job or possess certificates. The program should meet the requirements of the American Veterinary Medical Association and the Florida Veterinary Medical Association.

The content includes, but is not limited to, animal office procedure; animal pharmacy and pharmacology; animal examination room/area; animal surgical preparation and assisting; large and small animal nursing; laboratory animal procedures; animal radiology, and employability skills. The curriculum also includes general course material such as computer literacy and use, applied mathematics, biological science, communications skills, fundamentals of microbiology, and humanities or liberal arts. Applicants for the certification examination given by the Florida Veterinary Medical Association must be graduates of approved two-year programs. Program approval is defined as being approved by the American Veterinary Medical Association Committee on Animal Technician Activities and Training.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities are essential to the program. Instructional emphasis is placed on laboratory diagnostic techniques and methods utilized in hematology, blood coagulation, blood chemistry, liver-kidney-pancreatic funtion tests, body fluid examinations and parasitology.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills.

When provided, these activities are considered an integral part of this program. Students are encouraged to become members of their professional organization. Other appropriate organizations include North American Veterinary Technician Association and the Florida Association of Veterinary Medical Technicians.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Perform office procedures utilized in the management of a veterinary office.
02. Demonstrate an understanding of animal pharmacology by the proper handling and use of related drugs.
03. Perform under supervision, physical examinations, and laboratory procedures.
04. Assist with routine surgical and obstetrical procedures.
05. Prepare animals for surgical procedures.
06. Assist with anesthesia under supervision.
07. Perform surgical clean-up.
08. Perform large and small animal nursing techniques.
09. Perform urinalysis laboratory procedures.
10. Perform hematology laboratory procedures.
11. Perform parasitology laboratory procedures.
12. Perform microbiology laboratory procedures.
13. Perform necropsy laboratory procedures.
14. Perform cytology laboratory procedures.
15. Perform veterinary radiographic procedures.
16. Demonstrate research techniques on laboratory animals.
17. Apply knowledge of hospital management and equipment standards.
18. Apply knowledge of professional ethics, jurisprudence and professionalism.
19. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: _______

PROGRAM TITLE: Veterinary Technology POSTSECONDARY NUMBER: 0317.051200

01.0 PERFORM OFFICE PROCEDURES UTILIZED IN THE MANAGEMENT OF A VETERINARY OFFICE -- The student will be able to:

01.01 Make appointments.
01.02 Demonstrate correct telephone usage.
01.03 List and describe appropriate information on state/federal health regulations and prepare health and vaccination certificated for signatures.
01.04 Admit patients, take history, and maintain records.
01.05 Demonstrate basic filing of X-Rays, lab reports, etc.
01.06 Demonstrate client and public relations:
    (a) reception of client
    (b) discharge of client
    (c) educating the client
01.07 Demonstrate knowledge of ethics and jurisprudence.
01.08 Demonstrate knowledge of First-Aid (including CPR)
    (a) animal techniques
01.09 Identify documentation procedures for responding to veterinarian medical emergencies.
01.10 Practice basic cleanliness and orderliness in relationship to the on-going activity of a veterinary facility (including hospital, clinic, center, practice, laboratory, etc.).
01.11 Demonstrate the knowledge of the technician's role in generation of veterinary practice income.
01.12 Demonstrate basic bookkeeping.
01.13 Demonstrate business letter and report writing.
01.14 Use a computer to perform simple work processing and veterinary office billing and recordkeeping.

02.0 DEMONSTRATE AN UNDERSTANDING OF ANIMAL PHARMACOLOGY BY THE PROPER HANDLING AND USE OF RELATED DRUGS -- The student will be able to:

02.01 Identify and discuss general types and groups of drugs.
02.02 Label and package dispensed drugs correctly.
02.03 Read and fill prescriptions.
02.04 Use weights and measures correctly.
02.05 Calculate dosages.
02.06 Store and handle biologic and therapeutic agents appropriately.
02.07 Identify controlled substances and identify controlled handling.
02.08 Diagram and describe inventory control.
02.09 Prepare medications.
02.10 Discuss the signs of adverse drug reactions.
02.11 Use and explain appropriate routes and methods of drug administration.

03.0 PERFORM UNDER SUPERVISION, PHYSICAL EXAMINATIONS, AND LABORATORY PROCEDURES -- The student will be able to:

03.01 List "normal" in all common species: (a) temperature, (b) pulse, (c) respiration.
03.02 Use proper medical terminology in oral and written communications.
03.03 Perform under supervision and explain to clients: immunizations; procedures; types; and schedules.
03.04 Identify common breeds of animals: (a) large animals; (b) small animals; (c) laboratory animals.
03.05 Restrain patients: (a) removal from and placement in restraint of small and laboratory animals in/on cages/tables; (b) halter horses and cattle; (c) basic rope usage and knot tying; (d) application of: nose tongs, twitch, hog holder, Elizabethan

collar, dog safety muzzle, sheep restraint, bovine tail restraint, hose leg restraint, restraint of birds, operate cattle chute.

03.06 Identify heart and lung sounds with stethoscope.

03.07 Explain routine hospital procedures (e.g. surgeries, dental work, worming, patient care, etc.).

03.08 Explain and use knowledge of general nutritional requirements and practical approach to feeding common species.

03.09 Collect blood, skin scrapings, administer specific drugs under supervision of veterinarian.

03.10 Obtain and record patient history.

03.11 Describe training of companion animals and correction of behavior problems.

03.12 Identify common grains, grass, hay.

03.13 Identify common poisonous plants.

04.0 ASSIST WITH ROUTINE SURGICAL AND OBSTETRICAL PROCEDURES

-- The student will be able to:

04.01 Describe and identify knowledge of the following routine surgical procedures: (a) Ovariohysterectomy--dogs and cats; (b) Caesarian section--all common species; (c) orthopedic procedures; (d) Castration--all common species; (e) tail docking--pups and lambs; (f) laparotomies--all common species; (g) dystocias in common species--recognition of obstetrical equipment; (h) dehorning--cattle and goats; (i) prolapse--common species and incidence.

04.02 Describe and apply knowledge of the following obstetrical procedures: (a) demonstrate knowledge to assist in the artificial insemination techniques and equipment in various species. (b) Discuss pregnancy examination.

05.0 PREPARE ANIMALS FOR SURGICAL PROCEDURES

-- The student will be able to:

05.01 Prepare surgical sites--aseptic techniques.

05.02 Clean surgical instruments.

05.03 Prepare sterile surgical packs.

05.04 Prepare and use gowns, masks, gloves, and drapes.

05.05 Sterilize instruments and supplies using steam and cold methods.

05.06 Identify instruments.

05.07 Operate and maintain autoclaves.

05.08 Sanitize operating room and carefor used equipment.

05.09 Identify and use common suture materials, types, etc.

05.10 Position patients for common procedures.

05.11 Arrange lighting during surgery.

05.12 Demonstrate knowledge of gas sterilization of instruments and supplies.

06.0 ASSIST WITH ANESTHESIA UNDER SUPERVISION

-- The student will be able to:

06.01 List and describe the following anesthetics:
(a) Pre-operative medications, (b) Local anesthesia,
(c) Regional anesthesia, (d) General anesthesia--species variation: 1. IV anesthesia, 2. Inhalent anesthesia (methoxy-flurane, halothane, nitrous oxide), induction, endotrachael tube usage, equipment types and operation, 3. chemical restraints and muscle relaxants; (e) Anesthetic monitoring: 1. use of esophageal stethoscope, 2. EKG usage and audible monitoring, 3. stages and planes of anesthesia - recognition of clinical signs of stages and planes and understanding of significance of stages and planes;
(f) Recognition of anesthetic emergencies:
1. resuscitation, 2. use of respirator, 3. anesthetic antagonists and their use; (g) Monitoring and care during anesthetic recovery, (h) Care and maintenance of anesthetic

machine, (i) Waste anesthetic gas disposal and knowledge of human toxicity;

06.02 Assist surgically with: (a) Instrument handling; (b) Maintenance of asepsis, (c) Care of exposed tissues and organs, (d) Obstetrical assistance, (e) Operative records.

07.0 PERFORM SURGICAL CLEAN-UP -- The student will be able to:

07.01 Describe and perform surgical clean-up: (a) Equipment, (b) Surgical room or area, (c) Instruments, (d) Patient, (e) Personnel, (f) Proper disposal of waste and tissue.

08.0 PERFORM LARGE AND SMALL ANIMAL NURSING TECHNIQUES -- The student will be able to:

08.01 Demonstrate injection techniques: (a) intravenous, (b) subcutaneous, (c) intramuscular, (d) intradermal, (e) intraperitoneal, (f) sublingual.
08.02 Demonstrate intravenous catheterization: (a) jugular vein, (b) cephalic and saphenous vein (small animals).
08.03 Maintain fluid therapy (maintain catheter placement, determining and maintaining correct rate).
08.04 Describe and perform pre and post-operative patient care.
08.05 Administer oral medication by means of: (a) dose syringe, (b) balling gun, (c) oral speculum, (d) hand pilling--small animals, (e) gastric lavage--small animals.
08.06 Demonstrate bandaging techniques.
08.07 Apply and remove casts and splints.
08.08 Perform suture removal.
08.09 Apply emergency splint application.
08.10 Perform dental prophylaxis, using hand and machine techniques.
08.11 Perform therapeutic bathing, grooming, and dipping of small animals.
08.12 Demonstrate routine recordkeeping, care, and observation of hospitalized patients.
08.13 Practice stomach tubing: (a) dogs and cats, (b) cattle and sheep.
08.14 Describe and perform intramammary treatment (mastitis therapy only).
08.15 Implement patient and personnel safety measures.
08.16 Describe and perform orphan animal care: (a) small and large animals, (b) exotic animals.
08.17 Feed preparation and prescription diets to animals.
08.18 Clean and care for cages, kennels, and stalls.
08.19 Practice nail trimming for dogs, cats, and birds, and beak-trimming for birds.
08.20 Practice equine leg and tail wraps.
08.21 Express canine anal sacs.
08.22 Practice blood collection and transfusion.
08.23 Practice ear cleaning and dressing.
08.24 Demonstrate enema administration.
08.25 Demonstrate catheterization of urinary tract: (a) canine and feline, (b) large animals.
08.26 Take and examine skin scrapings.
08.27 Demonstrate emergency care of trauma patients.
08.28 Clean, prep, and medicate wounds or abscesses.
08.29 Apply topical medication to the eye.
08.30 Describe and perform nursing care of newborns.
08.31 Care and repair equipment.
08.32 Prepare for equine vaginal examination and cervical culture.
08.33 Demonstrate bovine mastitis testing.
08.34 Demonstrate hoof trimming: (a) bovine, (b) equine, (c) ovine, (d) porcine.
08.35 Mark and tattoo animals (sites and purposes).
08.36 Practice physical therapy.
08.37 Demonstrate sheath cleaning-equine.

09.0 PERFORM URINALYSIS LABORATORY PROCEDURES

-- The student will be able to:

09.01 Perform and demonstrate skill in the following: Urinalysis:

- (a) Sample collection
- (b) Physical properties
  1. color
  2. clarity
  3. specific gravity:
     urometer
     refractometer
- (c) Chemical properties
  1. dipstick and tablet tests
- (d) Microscopic sediment exam
- (e) Chemical evaluation of calculi

10.0 PERFORM HEMATOLOGY LABORATORY PROCEDURES

-- The student will be able to:

10.01 Perform and demonstrate skill in the following: Hematology:

- (a) Sample Collection procedures of all types
- (b) CBC
  1. hemoglobin
  2. hematocrit
  3. sedimentation rate
  4. total protein (refractometer)
  5. white cellcount
     - -glass pipette
     - -unopette
     - -automatic cell counter
  6. red cell count
     - -glass pipette
     - -unopette
     - -automatic cell counter
  7. microscopic exam
     - -preparation of blood film
     - -staining with a variety of Romanowsky-like stains
     - -leukocyte differential--normal/abnormal
     - -RBC morphology evaluation--normal/abnormal
     - -platelet estimation
     - -calculation of absolute value
     - -white blood cell correction for nucleated red cells
- (c) Reticulocyte count
- (d) Platelet count
- (e) Total esoinophil count
- (f) Blood parasite identification
  1. dirofilaria sp
     - -direct blood exam
     - -hematocrit tube method
     - -knotts test
     - -filter test
     - -heartworm kits
  2. haemobartonella sp
  3. anaplasma sp
  4. babesia sp
  5. trypanosoma sp
  6. eperythrozoan sp
- (g) Coagulation
  1. knowledge of clotting principles
  2. Knowledge of one-step prothrombin time
  3. Knowledge of partial thromboplastin time
  4. Knowledge of fibrinogen assay
- (h) Chemistries
  1. use of various types of instruments
  2. perform common tests (BUN, glucose, common enzymes, etc.)
  3. pregnancy tests (MIP tests)

        4. theory of colorimetry and photometry
    (i) Serology--perform various types of slide/card agglutinations
        1. cross matching
        2. Coombs' test
        3. canine brucellosis

11.0 PERFORM PARASITOLOGY LABORATORY PROCEDURES
-- The student will be able to:

11.01 Perform and demonstrate skill in the following: Parasitology:
- (a) Sample collection
- (b) External parasites
    - 1. sample preparation
    - 2. identification of common ecotoparasites
        - -mites
        - -lice
        - -ticks
- (c) Internal parasites
    - 1. fecal floatation techniques
    - 2. identification of parasites and their ova
        - -nematodes
        - -trematodes
        - -cestodes
        - -flukes
    - 3. knowledge of parasite life cycles

11.02 Perform and demonstrate skill in the following: Coprology
- (a) Occult blood
- (b) Fecal fat, trypsin

12.0 PERFORM MICROBIOLOGY LABORATORY PROCEDURES
-- The student will be able to:

12.01 Perform and demonstrate skill in the following: Microbiology:
- (a) Sample collection
- (b) Bacteriology
    - 1. culture and sensitivity
    - 2. identification of common bacteria
    - 3. common biological tests
    - 4. staining procedures
- (c) Mycology
    - 1. fungal culture and wet mount
    - 2. identification of common fungi
- (d) Viology--principles of sampling and testing
- (e) Principles of immunology

13.0 PERFORM NECROPSY LABORATORY PROCEDURES
-- The student will be able to:

13.01 Perform and demonstrate skill in the following: Necropsy procedures:
- (a) Sample collection, storage, shipment
- (b) Disposal of dead animals
- (c) Euthansia procedures
- (d) Handling of rabies suspects

14.0 PERFORM CYTOLOGY LABORATORY PROCEDURES
-- The student will be able to:

14.01 Perform and demonstrate skill in the following: Cytology:
- (a) Sample collection techniques for cytologic specimens
    - 1. color and clarity before and after centrifugation
    - 2. specific gravity
    - 3. total protein
    - 4. white cell count
    - 5. smear preparation and staining procedure
    - 6. basic cell identification (normal and common abnormals)

(b) Joint fluids
  1. color and clarity before and after centrifugation
  2. specific gravity
  3. total protein
  4. viscosity
  5. mucin precipitate test
  6. white cell count (WBC pipette and saline diluent only)
  7. smear preparation and staining procedure
  8. basic cell identification (normal and common abnormals)

(c) Cerebrospinal fluids
  1. color and clarity before and after centrifugation
  2. specific gravity
  3. quantitative protein
  4. white cell count
  5. red cell count
  6. smear preparation and staining procedures
  7. basic cell identification (normal and common abnormals)

(d) Airway washings (trachael washes, nasal flushes, etc.)
  1. smear preparation and staining procedures
  2. basic cell identification (normal and abnormals)

(e) Tissue aspirates and impressions
  1. smear preparation and staining procedures
  2. basic cell identification (normal and common abnormals)

(f) Bone marrows
  1. smear preparation and staining procedure
  2. basic cell identification (normal and common abnormals)
  3. M/E ratio

(g) Vaginal smears
  1. slide preparation and staining procedures
  2. basic cell identification (normal and common abnormals)
  3. knowledge of estrous cycle

(h) Semen evaluation
  1. collection techniques
  2. slide preparation and staining procedure
  3. sperm count
  4. identification of abnormal sperm types

14.2 Perform and demonstrate skill in the following: Miscellaneous laboratory procedures:

(a) Preparation, preservation, and shipment of laboratory samples
(b) Care and maintenance of laboratory equipment
(c) Quality control (normal and abnormal controls)
(d) Initiation and maintenance of laboratory records
(e) Basic principles of laboratory safety
(f) Preparation of common reagents

15.0 PERFORM VETERINARY RADIOGRAPHIC PROCEDURES
-- The student will be able to:

15.01 Perform and demonstrate the following radiographic procedures:

(a) Implement safety measures
(b) Prepare and use technique charts

(c) Take and process diagnostic radiographs
  1. small animal positioning and techniques
  2. large animal positioning and techniques
  3. laboratory or exotic animal positioning and techniques

(d) Use darkroom procedures
  1. hand processing
  2. automatic processing

(e) Replace or replenish developer and fixer
(f) Demonstrate film labeling, filing, and storage
(g) Maintain radiographic quality control
(h) Maintain equipment
  1. hanging or storage of gloves or aprons
  2. cleaning screens
  3. ability to detect or suspect faulty equipment operation

(i) Proper use of both stationary and portable x-ray machines
(j) Perform special radiographic techniques (including contrast media studies)

16.0 DEMONSTRATE RESEARCH TECHNIQUES ON LABORATORY ANIMALS

-- The student will be able to:

16.01 Explain basic principles of research, and necessity for use of laboratory animals.
16.02 Identify and restrain common species of small laboratory animals.
16.03 Determine sex of laboratory animals.
16.04 Perform and/or supervise basic animal care procedure, e.g. feeding, watering, breeding, identification, and handling.
16.05 Administer or inject drugs or medicaments using appropriate sites and routes.
16.06 Collect body tissues or fluids.
16.07 Demonstrate knowledge of gnotobiotic techniques.
16.08 Perform oral dosing (intubation, blunt needle, stomach tube)
16.09 Anesthetize laboratory animals.
16.10 Identify common disease signs of laboratory animals.
16.11 Identify species of non-human primates.

17.0 APPLY KNOWLEDGE OF HOSPITAL MANAGEMENT AND EQUIPMENT STANDARDS

-- The student will be able to:

17.01 Demonstrate knowledge of the principles of infection control, cross contamination, and zoonoses.
17.02 Maintain inventory of supplies, medications and disposables.
17.03 Demonstrate knowledge of personnel management, assignments.
17.04 Determine personnel needs on each shift.
17.05 Perform routine maintenance checks and monitor equipment use.
17.06 Describe risk management techniques.

18.0 APPLY KNOWLEDGE OF PROFESSIONAL ETHICS, JURISPRUDENCE AND PROFESSIONALISM

-- The student will be able to:

18.01 List the benefits of belonging to a professional organization of animal techniques.
18.02 Describe the technician/veterinarian relationship.
18.03 Define ethics.

19.0 DEMONSTRATE EMPLOYABILITY SKILLS

-- The student will be able to:

19.01 Conduct a job search.
19.02 Secure information about a job.
19.03 Identify documents that may be required when applying for a job.
19.04 Complete a job application.
19.05 Demonstrate competence in job interview techniques.
19.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
19.07 Identify acceptable work habits.
19.08 Demonstrate knowledge of how to make job changes appropriately.
19.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK　　　　PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION　　　　EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Vision Care Assisting

CODE NUMBER: Secondary 8421000　　　　Postsecondary ______

Florida CIP 0317.070201

SECONDARY
SCHOOL CREDITS 6　　COLLEGE CREDITS ______　　POSTSECONDARY ADULT VOCATIONAL CREDITS ____

APPLICABLE LEVEL(S): ____ 7-9 X 9-12 ____ Postsecondary Adult Vocational

______ Postsecondary Vocational　　X Other 30, 31

CERTIFICATION COVERAGE: TEC OPTICS @ 7 G

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment at the aide level to assist opticians (32514219), (079.364-014), lens grinders, and other trained workers in the field of optics.

The content includes, but is not limited to, refraction of light, physics of glass, conversion of metrics, operation of specific machinery, and use of medical equipment used in the testing of eyes, safety and health, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8421010	Vision Care Assisting 1
8421020	Vision Care Assisting 2
8421030	Vision Care Assisting 3
8421040	Vision Care Assisting 4
8421050	Vision Care Assisting 5
8421060	Vision Care Assisting 6

II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Complete frame and patient measurements.
02. Demonstrate knowledge of lens theory.
03. Demonstrate knowledge of acceptable communication skills, physical safety, ethical behavior, and legal aspects.
04. Demonstrate employability skills.
05. Grind and polish a glass lens to given specifications.
06. Edge, tint and inspect a pair of glass or plastic lenses and insert into a frame.
07. Demonstrate knowledge of frame selection techniques used in a dispensing office setting.
08. Demonstrate knowledge of frame adjustment and alignment.
09. Recognize patient needs in relation to lens characteristics.
10. Complete a case history.
11. Prepare patients for and assist in testing for eye disorders.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: 8421000

PROGRAM TITLE: Vision Care Assisting POSTSECONDARY NUMBER: ______

01.0 COMPLETE FRAME AND PATIENT MEASUREMENTS -- The student will be able to:

01.01 Identify different frame and temple types.
01.02 Complete patient prescription calculations.
01.03 Measure the frame PD and the eye Pupiliary Distance.
01.04 Make estimates and approximations and judge the reasonableness of the result in making stock selections.

02.0 DEMONSTRATE KNOWLEDGE OF LENS THEORY -- The student will be able to:

02.01 Demonstrate knowledge of the anatomy and physiology of the eye and the disorders effecting vision.
02.02 Demonstrate knowledge of the metric system and conversion to the Apothecary system.
02.03 Demonstrate knowledge of optical measurement.
02.04 Demonstrate knowledge of light refraction and the physics of glass.
02.05 Demonstrate ability to evaluate and draw conclusions.

03.0 DEMONSTRATE KNOWLEDGE OF ACCEPTABLE COMMUNICATION SKILLS, PHYSICAL SAFETY, ETHICAL BEHAVIOR, AND LEGAL ASPECTS -- The student will be able to:

03.01 Recognize and use various forms of communication.
03.02 Use appropriate optical terminology and abbreviations.
03.03 Use the intercom and telephone.
03.04 Demonstrate effective interpersonal relationships.
03.05 Recognize ethical and legal ramifications of actions/inactions.
03.06 Follow policies and procedures related to safety.
03.07 Identify and demonstrate proper work ethic.
03.08 Perform first aid and CPR.
03.09 Identify workers in the Optical field and the training requirement needed by each worker.
03.10 Demonstrate ability to report observations in written or oral form.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 GRIND AND POLISH A GLASS LENS TO GIVEN SPECIFICATIONS -- The student will be able to:

05.01 Layout and block a cylindrical and spherical lens.
05.02 Remove required amount of glass as specified from cylindrical and spherical lens.
05.03 Cut concave and convex cylinder to given specification.
05.04 Finish and polish a glass lens to given specifications.

06.0 EDGE, TINT AND INSPECT A PAIR OF GLASS OR PLASTIC LENSES AND INSERT INTO A FRAME -- The student will be able to:

06.01 Edge and bevel a lens.
06.02 Heat treat a lens.
06.03 Check a lens for safety.
06.04 Insert lens into a frame.
06.05 Demonstrate knowledge of frame repair.
06.06 Demonstrate knowledge of lens tinting.
06.07 Inspect completed spectacles.

07.0 DEMONSTRATE KNOWLEDGE OF FRAME SELECTION TECHNIQUES USED IN A DISPENSING OFFICE SETTING -- The student will be able to:

07.01 Identify frame parts and materials.
07.02 Demonstrate knowledge of frame measurement.
07.03 Demonstrate pupilliary distance measurement.
07.04 Demonstrate frame selection considering customer and frame characteristics.

08.0 DEMONSTRATE KNOWLEDGE OF FRAME ADJUSTMENT AND ALIGNMENT -- The student will be able to:

08.01 Select correct frame and bridge size.
08.02 Verify prescription information.
08.03 Insert lenses in zyl, optyl, and nylon frames.
08.04 Perform frame adjustment and alignment.
08.05 Perform frame repairs.

09.0 RECOGNIZE PATIENT NEEDS IN RELATION TO LENS CHARACTERISTICS -- The student will be able to:

09.01 Identify the effects of types of lights on glass lenses.
09.02 Describe the effects of types of tint on the eye.
09.03 Identify types of glass coatings.
09.04 Identify the effects of the optical prism on lenses.
09.05 Define prism imbalance, vertical imbalance and full imbalance.
09.06 Identify occupational eyewear and special purpose frames.

10.0 COMPLETE A CASE HISTORY -- The student will be able to:

10.01 Record the patient's chief complaints.
10.02 Record the patient's medical and ocular history.
10.03 Record the family's medical and ocular history.
10.04 Record the social history.

11.0 PREPARE PATIENTS FOR AND ASSIST IN TESTING FOR EYE DISORDERS -- The student will be able to:

11.01 Define myopia, hyperopia, astigmatism, and ametropia.
11.02 Perform visual acuity screening and record results.
11.03 Demonstrate knowledge of selected instruments used in determining specific eye disorders.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations COURSE CREDIT: 1

PROGRAM TITLE: Vision Care Assisting PROGRAM NUMBER: 8421000

COURSE TITLE: Vision Care Assisting 1 COURSE NUMBER: 8421010

COURSE DESCRIPTION: This course prepares students with communications, safety, ethical, legal, employability, basic science and introductory vision care skills.

01.0 COMPLETE FRAME AND PATIENT MEASUREMENTS -- The student will be able to:

01.01 Identify different frame and temple types.
01.02 Complete patient prescription calculations.
01.03 Measure the frame PD and the eye Pupiliary Distance.
01.04 Make estimates and approximations and judge the reasonableness of the result in making stock selections.

02.0 DEMONSTRATE KNOWLEDGE OF LENS THEORY -- The student will be able to:

02.01 Demonstrate knowledge of the anatomy and physiology of the eye and the disorders effecting vision.
02.02 Demonstrate knowledge of the metric system and conversion to the Apothecary system.
02.03 Demonstrate knowledge of optical measurement equipment.
02.04 Demonstrate knowledge of light refraction and the physics of glass.
02.05 Demonstrate ability to evaluate and draw conclusions.

03.0 DEMONSTRATE KNOWLEDGE OF ACCEPTABLE COMMUNICATION SKILLS, PHYSICAL SAFETY, ETHICAL BEHAVIOR, AND LEGAL ASPECTS -- The student will be able to:

03.01 Recognize and use various forms of communication.
03.02 Use appropriate optical terminology and abbreviations.
03.03 Use the intercom and telephone.
03.04 Demonstrate effective interpersonal relationships.
03.05 Recognize ehtical and legal ramifications of actions/inactions.
03.06 Follow policies and procedures related to safety.
03.07 Identify and demonstrate proper work ethic.
03.08 Perform first aid and CPR.
03.09 Identify workers in the Opitcal field and the training requirement needed by each worker.
03.10 Demonstrate ability to report observations in written or oral form.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.02 Secure information about a job.
04.03 Identify documents which may be required when applying for a job.
04.04 Complete a job application form correctly.

05.0 GRIND AND POLISH A GLASS LENS TO GIVEN SPECIFICATIONS -- The student will be able to:

05.01 Layout and block a cylindrical and spherical lens.
05.02 Remove required amount of glass as specified from cylindrical and spherical lens.
05.03 Cut concave and convex cylinder to given specification.
05.04 Finish and polish a glass lens to given specifications.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations COURSE CREDIT: 1

PROGRAM TITLE: Vision Care Assisting PROGRAM NUMBERL 8421000

COURSE TITLE: Vision Care Assisting 2 COURSE NUMBER: 8421020

COURSE DESCRIPTION: This course prepares students with basic frame dispensing and job seeking skills.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.01 Conduct a job search.
04.05 Demonstrate competence in job interview techniques.

06.0 EDGE, TINT AND INSPECT A PAIR OF GLASS OR PLASTIC LENSES AND INSERT INTO A FRAME -- The student will be able to:

06.01 Edge and bevel a lens.
06.02 Heat treat a lens.
06.03 Check a lens for safety.
06.04 Insert lens into a frame.
06.05 Demonstrate knowledge of frame repair.
06.06 Demonstrate knowledge of lens tinting.
06.07 Inspect completed spectacles.

07.0 DEMONSTRATE KNOWLEDGE OF FRAME SELECTION TECHNIQUES USED IN A DISPENSING OFFICE SETTING -- The student will be able to:

07.01 Identify frame parts and materials.
07.02 Demonstrate knowledge of frame measurement.
07.03 Demonstrate pupilliary distance measurement.
07.04 Demonstrate frame selection considering customer and frame characteristics.

08.0 DEMONSTRATE KNOWLEDGE OF FRAME ADJUSTMENT AND ALIGNMENT -- The student will be able to:

08.01 Select correct frame and bridge size.
08.02 Verify prescription information.
08.03 Insert lenses in zyl, optyl, and nylon frames.
08.04 Perform frame adjustment and alignment.
08.05 Perform frame repairs.

09.0 RECOGNIZE PATIENT NEEDS IN RELATION TO LENS CHARACTERISTICS -- The student will be able to:

09.01 Identify the effects of types of lights on glass lenses.
09.02 Describe the effects of types of tint on the eye.
09.03 Identify types of glass coatings.
09.04 Identify the effects of the optical prism on lenses.
09.05 Define prism imbalance, vertical imbalance and full imbalance.
09.06 Identify occupational eyewear and special purpose frames.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations COURSE CREDIT: 1

PROGRAM TITLE: Vision Care Assisting PROGRAM NUMBER: 8421000

COURSE TITLE: Vision Care Assisting 3 COUSE NUMBER: 8421030

COURSE DESCRIPTION: This course prepares students to prepare patients for and assist in testing for eye disorders and to behave ethically on the job.

10.0 COMPLETE A CASE HISTORY -- The student will be able to:

10.01 Record the patient's chief complaints.
10.02 Record the patient's medical and ocular history.
10.03 Record the family's medical and ocular history.
10.04 Record the social history.

11.0 PREPARE PATIENTS FOR AND ASSIST IN TESTING FOR EYE DISORDERS -- The student will be able to:

11.01 Define myopia, hyperopia, astigmatism, and ametropia.
11.02 Perform visual acuity screening and record results.
11.03 Demonstrate knowledge of selected instruments used in determining specific eye disorders.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS		EFFECTIVE DATE:	July, 1993
PROGRAM AREA:	Health Occupations	COURSE CREDIT:	1
PROGRAM TITLE:	Vision Care Assisting	PROGRAM NUMBER:	8421000
COURSE TITLE:	Vision Care Assisting 4	COURSE NUMBER:	8421040

COURSE DESCRIPTION: This course is a practicum (clinical experience) which covers all aspects of vision care assisting. Courses #1, 2, and 3 are pre-requisite to this course.

STUDENT PERFORMANCE STANDARDS		EFFECTIVE DATE:	July, 1993
PROGRAM AREA:	Health Occupations	COURSE CREDIT:	1
PROGRAM TITLE:	Vision Care Assisting	PROGRAM NUMBER:	8421000
COURSE TITLE:	Vision Care Assisting 5	COURSE NUMBER:	8421050

COURSE DESCRIPTION: This course is a practicum (clinical experience) which covers all aspects of vision care assisting. Courses #1, 2, 3 and 4 are pre-requisite to this course.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations

COURSE CREDIT: 1

PROGRAM TITLE: Vision Care Assisting

PROGRAM NUMBER: 8421000

COURSE TITLE: Vision Care Assisting 6

COURSE NUMBER: 8421060

COURSE DESCRIPTION: This course is a practicum (clinical experience) which covers all aspects of vision care assisting. Courses #1, 2, 3, 4, and 5 are pre-requisite to this course. Students should be employable in many assisting capacities in the ophthalmic professions.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1993

PROGRAM TITLE: Vision Care Technology/Opticianry

CODE NUMBER: Secondary _______ Postsecondary ______

Florida CIP 0317.070500

SECONDARY SCHOOL CREDITS ______ COLLEGE CREDITS X POSTSECONDARY ADULT VOCATIONAL CREDITS ______

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

X Postsecondary Vocational _____ Other ______________

CERTIFICATION COVERAGE:

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as dispensing optician apprentices, or optometicians, dispensing, and measuring (32514211) or to provide supplemental training for persons previously or currently employed in these occupations.

The program prepares students to perform a variety of vision care procedures or to specialize in a particular area of vision care under the supervision of an optometrist or ophthalmologist.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The content includes, but is not limited to, general studies, basic sciences, optometric sciences, ophthalmic clinical techniques, ophthalmic dispensing and office management.

II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

III. SPECIAL NOTE: Paraoptometric Section of the American Optometric Association is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The program should be accredited by the Council on Optometric Education and students should be prepared to take the certification examination offered by the National Paraoptometric Registry of the American Optometric Association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Apply knowledge of anatomy and physiology of the eye to normal and abnormal ocular function.
02. Demonstrate knowledge of the effects ophthalmic devices have in correcting the errors of human vision.
03. Demonstrate knowledge of ocular disease and emergencies.
04. Demonstrate knowledge of vision therapy in rehabilitation of abnormal ocular functions.
05. Demonstrate knowledge of communication skills, legal and ethical principles, interpersonal relationships and office management.
06. Collect patient data under the supervision of a practitioner.
07. Demonstrate knowledge of contact lenses as a vision correction device.
08. Fabricate ophthalmic prescription spectacles.
09. Demonstrate knowledge of frame and lens selection; and eyewear dispensing and adjustment.
10. Demonstrate employability skills.
11. Demonstrate knowledge of immune-deficiency diseases, including AIDS.

STUDENT PERFORMANCE STANDARDS EFFECTIVE DATE: July, 1993

PROGRAM AREA: Health Occupations SECONDARY NUMBER: ______

PROGRAM TITLE: Vision Care Technology/Opticianry POSTSECONDARY NUMBER: 0317.070500

01.0 APPLY KNOWLEDGE OF ANATOMY AND PHYSIOLOGY OF THE EYE TO NORMAL AND ABNORMAL OCULAR FUNCTION -- The student will be able to:

01.01 Demonstrate understanding of the interrelationships and interdependency of various body systems.
01.02 Demonstrate in depth knowledge of anatomy and physiology of the visual system.
01.03 Demonstrate knowledge of growth and development of the eye from birth to old age.

02.0 DEMONSTRATE KNOWLEDGE OF THE EFFECTS OPHTHALMIC DEVICES HAVE IN CORRECTING THE ERRORS OF HUMAN VISION -- The student will be able to:

02.01 Demonstrate an understanding of refractive errors.
02.02 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.
02.03 Describe the influence of prisms on the behavior of light.
02.04 Apply the principles of light acting on a curved single refracting surface to the optics of ophthalmic lenses for parallel and nonparallel light.
02.05 Describe the relationship and optical properties of cylindrical lenses.
02.06 Demonstrate knowledge of the theory of lens surface power measuring devices.
02.07 Demonstrate knowledge of prismatic effect by decentration.
02.08 Demonstrate the influence of lens thickness and surface curvature on the effective ophthalmic prescription.
02.09 Diagram lens powers on an optical cross.

03.0 DEMONSTRATE KNOWLEDGE OF OCULAR DISEASE AND EMERGENCIES -- The student will be able to:

03.01 Perform ocular first aid.
03.02 Demonstrate knowledge of the differences between the normal and abnormal eye.
03.03 Demonstrate the ability to recognize diseases of the eye and their effect on vision.
03.04 Demonstrate the ability to recognize sight threatening emergencies and related patient management.
03.05 Recognize the implications of sudden vision loss.
03.06 Under supervision, collect clinical data.
03.07 Demonstrate knowledge of the application of pharmacological principles in the treatment of the eye.

04.0 DEMONSTRATE KNOWLEDGE OF VISION THERAPY IN REHABILITATION OF ABNORMAL OCULAR FUNCTIONS -- The student will be able to:

04.01 Assess the level of binocularity and identify the compensating anomalies of the developmental process.
04.02 Distinguish between functional and paretic motor problems.
04.03 Under supervision, administrate and interpret procedures to assess the level of binocularity and the remediation of anomalies.
04.04 Assist in/administer visual therapy.

05.0 DEMONSTRATE KNOWLEDGE OF COMMUNICATION SKILLS, LEGAL AND ETHICAL PRINCIPLES, INTERPERSONAL RELATIONSHIPS AND OFFICE MANAGEMENT -- The student will be able to:

05.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
05.02 Demonstrate effective telephone and written communication skills and computer literacy.
05.03 Maintain and file patient records.
05.04 Bill and collect current and overdue accounts.
05.05 Maintain office inventory.
05.06 Demonstrate knowledge of medical terminology.
05.07 Practice accepted work ethic.
05.08 Maintain equipment.
05.09 Schedule patients.
05.10 Complete and file third party forms.
05.11 Maintain office recall system.

06.0 COLLECT PATIENT DATA UNDER THE SUPERVISION OF A PRACTITIONER -- The student will be able to:

06.01 Elicit and record patient medical, occupational, recreational and social history.
06.02 Demonstrate knowledge of the principles of measuring visual acuity at different age levels and reading maturational levels.
06.03 Develop skill in assessing visual entrance skills.
06.04 Perform hypertension screening.
06.05 Perform ocular measurements.
06.06 Identify and verify ophthalmic prescription spectacles within accepted laboratory tolerances.
06.07 Measure and record intraocular pressure.
06.08 Measure and record a visual field.
06.09 Perform photographic documentation of ocular conditions.
06.10 Describe components of and instrumentation used in comprehensive vision evaluation.

07.0 DEMONSTRATE KNOWLEDGE OF CONTACT LENSES AS A VISION CORRECTION DEVICE -- The student will be able to:

07.01 Explain the history and background of contact lenses.
07.02 Evaluate and record relevant ocular parameters.
07.03 Demonstrate knowledge of the advantage and disadvantages of various contact lens materials and designs.
07.04 Verify and modify the parameters of all types of contact lenses within accepted laboratory tolerances.
07.05 Explain the relationship of a contact lens to the physiology of the eye, considering oxygen and tear flow requirements.
07.06 Describe acceptable vs. unacceptable symptoms a contact lens patient may experience and the clinical procedures used to correct adverse contact lens adaptation.
07.07 Select appropriate contact lens types for patients by their specific personal and visual needs.
07.08 Describe techniques for fitting various types of contact lenses.
07.09 Select appropriate lens care systems and instruct a patient in the maintenance, hygiene, and wearing of all types of contact lenses.
07.10 Demonstrate knowledge of contact lens fee structuring, marketing, and service agreements.
07.11 Demonstrate proper ordering, inventorying, and recordkeeping procedures used with contact lenses.

08.0 FABRICATE OPHTHALMIC PRESCRIPTION SPECTACLES -- The student will be able to:

08.01 Demonstrate an understanding of the process of surfacing of lenses.
08.02 Compute lens orientation and layout in preparation for edging.
08.03 Machine and hand edge lenses.
08.04 Temper lenses for impact resistance.
08.05 Drill, groove and notch lenses for rimless mountings.
08.06 Edge polish hard resin lenses.

08.07 Tint hard resin lenses.
08.08 Mount lenses into all frame types to accepted prescription tolerances.
08.09 Perform final inspection of ophthalmic prescription glasses in accordance with American Standard Institute (ANSI) Standards.

09.0 DEMONSTRATE KNOWLEDGE OF FRAME AND LENS SELECTION; AND EYEWEAR DISPENSING AND ADJUSTMENT -- The student will be able to:

09.01 Identify ophthalmic frames and parts.
09.02 Determine and record frame and lens measurements.
09.03 Measure and record all appropriate patient measurements for prescription fitting.
09.04 Assist patients with frame and lens selection.
09.05 Adjust all types of frames to standard alignment for dispensing to a patient.
09.06 Demonstrate a working knowledge of specialty ophthalmic lenses.
09.07 Perform repairs on plastic and metal frames.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

10.01 Conduct a job search.
10.02 Secure information about a job.
10.03 Identify documents that may be required when applying for a job.
10.04 Complete a job application.
10.05 Demonstrate competence in job interview techniques.
10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
10.07 Identify acceptable work habits.
10.08 Demonstrate knowledge of how to make job changes appropriately.
10.09 Demonstrate acceptable employee health habits.

11.0 DEMONSTRATE KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS -- The student will be able to:

11.01 Distinguish between fact and fallacy about the transmission and treatment of immune-deficiency diseases.
11.02 Identify community resources and services available to the victims of immune-deficiency diseases.
11.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of immune-deficiency diseases.
11.04 Apply infection control techniques designed to prevent the spread of immune-deficiency diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
11.05 Demonstrate knowledge of the legal aspects of AIDS.

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